SCHOOL

NAVAL POSTGRADUATE SCHOOL
Monterey, California

THESIS

M2572

NAVY CONSTRUCTION CONTRACT REGULATIONS
VS.
THE BOARD OF CONTRACT APPEALS

by

Thomas David McMurray

December 1987

Thesis Advisor: Roger Evered

Approved for public release; distribution is unlimited.

T239082

TY CLASSIFICATION OF THIS PAGE

REPORT DOCUMENTATION PAGE

PORT SECURITY CLASSIFICATION UNCLASSIFIED	1b RESTRICTIVE MARKINGS
CURITY CLASSIFICATION AUTHORITY	3 DISTRIBUTION / AVAILABILITY OF REPORT Approved for public release; distribution is unlimited.
CLASSIFICATION / DOWNGRADING SCHEDULE	
FORMING ORGANIZATION REPORT NUMBER(S)	5. MONITORING ORGANIZATION REPORT NUMBER(S)
AME OF PERFORMING ORGANIZATION al Postgraduate School	6b OFFICE SYMBOL (If applicable) 54
	7a. NAME OF MONITORING ORGANIZATION Naval Postgraduate School
DRESS (City, State, and ZIP Code) terey, California 93943-5000	7b. ADDRESS (City, State, and ZIP Code) Monterey, California 93943-5000
AME OF FUNDING / SPONSORING RGANIZATION	8b. OFFICE SYMBOL (If applicable)
	9. PROCUREMENT INSTRUMENT IDENTIFICATION NUMBER
DRESS (City, State, and ZIP Code)	10. SOURCE OF FUNDING NUMBERS

PROGRAM ELEMENT NO.	PROJECT NO.	TASK NO	WORK UNIT ACCESSION NO.

TLE (Include Security Classification)

CONSTRUCTION CONTRACT REGULATIONS VS. THE BOARD OF CONTRACT APPEALS

ERSONAL AUTHOR(S)

urray, Thomas D.

TYPE OF REPORT	13b. TIME COVERED	14. DATE OF REPORT (Year, Month, Day)	15 PAGE COUNT
ter's Thesis	FROM _____ TO _____	1987 December	103

UPPLEMENTARY NOTATION

COSATI CODES			18. SUBJECT TERMS (Continue on reverse if necessary and identify by block number)
IELD	GROUP	SUB-GROUP	
			Navy construction contracts.

BSTRACT (Continue on reverse if necessary and identify by block number)

This thesis addresses construction contracting in the United States Navy. It compares the Government construction contract regulations with decisions by the Boards of Contract Appeals.

Nine topics are researched including submittal reviews, profit, change orders and changes, notice to proceed, acceleration, beneficial occupancy, weather delays, and extended overhead.

The Boards' decisions are used to understand the topics and to identify weaknesses in the regulations. Recommendations are made to improve the Naval Facilities Engineering Command Contracting Manual (P-68).

ISTRIBUTION / AVAILABILITY OF ABSTRACT UNCLASSIFIED/UNLIMITED ☐ SAME AS RPT ☐ DTIC USERS	21. ABSTRACT SECURITY CLASSIFICATION UNCLASSIFIED
NAME OF RESPONSIBLE INDIVIDUAL Prof. Roger Evered	22b. TELEPHONE (Include Area Code) (408)-646-2646
	22c. OFFICE SYMBOL 54ev

ORM 1473, 84 MAR 83 APR edition may be used until exhausted. All other editions are obsolete

SECURITY CLASSIFICATION OF THIS PAGE

☆ U.S. Government Printing Office: 1986—606-24.

Approved for public release; distribution is unlimited.

Navy Construction Contract Regulations vs. The Board of Contract Appeals

by

Thomas David McMurray
Lieutenant Commander, United States Navy
BSME, University of South Carolina, 1975

Submitted in partial fulfillment of the
requirements for the degree of

MASTER OF SCIENCE OF MANAGEMENT

from the

NAVAL POSTGRADUATE SCHOOL
December 1987

ABSTRACT

This thesis addresses construction contracting in the United States Navy. It compares the Government construction contract regulations with decisions by the Boards of Contract Appeals.

Nine topics are researched including submittal reviews, profit, change orders and changes, notices to proceed, acceleration, beneficial occupancy, weather delays, and extended overhead.

The Boards' decisions are used to understand the topics and to identify weaknesses in the regulations. Recommendations are made to improve the Naval Facilities Engineering Command Contracting Manual (P-68).

Thes S
M252
C.1

TABLE OF CONTENTS

I. INTRODUCTION ---------- 6

II. LITERATURE REVIEW ---------- 8

III. METHODS ---------- 10

IV. ANALYSIS ---------- 15

A. SUBMITTALS ---------- 15

B. PROFIT ---------- 17

C. PAYMENT FOR STORED MATERIAL ---------- 17

D. CHANGE ORDERS AND CHANGES ---------- 19

1. Change Orders ---------- 19

2. Accord and Satisfaction ---------- 21

3. Time Extensions ---------- 23

E. NOTICE TO PROCEED ---------- 23

F. ACCELERATION ---------- 24

G. BENEFICIAL OCCUPANCY ---------- 26

H. WEATHER DELAYS ---------- 29

I. EXTENDED OVERHEAD ---------- 30

V. CONCLUSIONS AND RECOMMENDATIONS ---------- 31

A. GENERAL CONCLUSIONS ---------- 31

B. RECOMMENDATIONS BY TOPIC ---------- 33

1. Submittals ---------- 33

2. Profit ---------- 34

3. Payment for Stored Material -------- 34

4. Change Orders and Changes ---------- 35

5. Notice to Proceed ---------- 36

6. Acceleration ---------- 36

7. Beneficial Occupancy ---------- 37

8. Weather Delays ---------- 37

9. Extended Overhead ---------- 38

APPENDIX A: THE BOARDS OF CONTRACT APPEALS --- 39

APPENDIX B: LIST OF BCA CASES ---------- 53

APPENDIX C: CHANGE ORDERS ---------- 57

APPENDIX D: WEATHER DELAYS ---------- 68

APPENDIX E: EXTENDED OVERHEAD ---------- 76

APPENDIX F: CAPITAL ELECTRIC, A CASE STUDY --- 92

LIST OF REFERENCES ---------- 100

INITIAL DISTIBUTION LIST ---------- 102

I. INTRODUCTION

Government contracting is dynamic. All the elements of the system--the contractors, the Government personnel, the technology, the regulations, the budget, the laws--all are changing with respect to time. The ability to perform in a dynamic environment rests on the ability to see and react to changes as they occur. Organizations must respond and function accordingly.

This thesis looks at a subset of Government contracting. It focuses on construction contracting within the United States Navy. Responsibility for construction in the Navy rests generally with the Naval Facilities Engineering Command (NAVFAC). NAVFAC is a largely decentralized organization headquarted in Alexandria, Virginia. It has six geographic divisions called Engineering Field Divisions (EFDs). Reporting to each EFD are numerous field offices.

Policy for construction contracting in the Navy comes from a variety of sources. Starting with the Federal Acquisition Regulations (FAR), it traces its way down through the Department of Defense, Navy, and NAVFAC publications.

Imagine a contract administrator in the field who faces a problem in evaluating a contractor claim. Will his response match the above policies? Is he knowledgeable of

the policies, and if not, does he know where to go to find the answer? Is the answer readily available in the regulations in a clear, informative manner? Finally, once the decision has been made, how can NAVFAC or the EFD measure, from a management control standpoint, whether or not the decisions are being made correctly?

The answers to questions as broad in scope as these do not come easily; rather, they tend to evolve incrementally by solving smaller pieces of the puzzle when possible. This thesis attempts to isolate one small aspect of the overall problem and view it in detail.

The thesis will look at decisions made by the Boards of Contract Appeal (BCAs), and it will look at the regulations available in the field. The focal research question asked is: Does the individual contract manager have before him the necessary information to address the topics found before the Boards? Or, from a slightly different angle: Can the decisions of the BCAs improve the regulations and make them more useful to the contract manager?

Before proceeding with the thesis the reader should have a general understanding of what the Boards of Contract Appeal are and how they operate. For a more complete understanding of the Boards the reader is referred to Appendix A.

II. LITERATURE REVIEW

This chapter identifies the literature base upon which the thesis is written.

The goal of this thesis is to compare acquisition regulations with a selection of BCA decisions. Therefore, the acquisition regulations and the decisions by the Boards are the main elements of research.

The regulations consist of a heirarchy of publications starting with the FAR and working down to the NAVFAC Contracting Manual, the P-68. EFD level instructions were not used due to the differences which exist between the EFDs. The regulations down to the P-68 are common to all NAVFAC offices and it was decided to limit research to that level. Since the P-68 is under revision, both the earlier pre-FAR version and the 1986 draft version were reviewed.

Approximately 100 Board of Contract Appeals cases were reviewed. There is no other source known which collects, edits, or compiles the decisions in a useful form for NAVFAC field activities. This is unfortunate because the amount of useful knowledge in the cases is vast, but the access to it is time-comsuming. The selection of the cases is addressed in Chapter III.

Additionally, course outlines and notes were collected from various training courses by the Naval Facilities Contract Training Center (NFCTC), the Air Force Institute of

Technology (AFIT) and the Army Logistics Management Center (ALMC). While it is recognized that not everyone in NAVFAC has access to all of the courses, the outlines do provide an excellent body of knowledge and applications not found elsewhere.

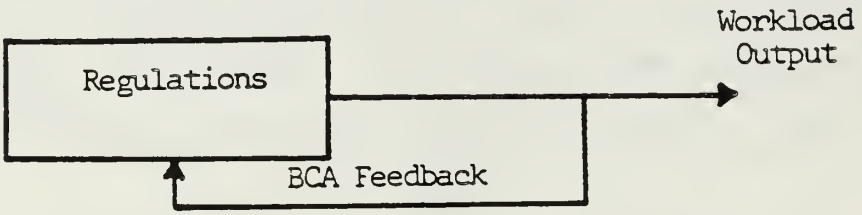
Research beyond the above sources was limited. Time was one constraint, another was the lack of relevant material produced by library searches or searchs using the Defense Logistics Studies Information Exchange (DLSIE). The Boards' decisions spoke very capably for themselves, likewise the regulations, so the literature review was focused there.

III. METHOD

This chapter explains the research methodology.

The goal of this thesis is to compare the Navy construction contracting regulations with recent decisions by the Boards of Contract Appeals. This comparison is then used to improve the regulations.

The logic behind the thesis is a simple feedback model which measures output, then alters the system to improve the output.



The regulations form the system; the BCA decisions are one measurable output. The BCA decisions can be analysed to find weakness in the regulations. The regulations can then be corrected or improved.

The BCA decisions were chosen as the output because they represent areas of uncertainity and sometimes areas where the Government acted erroneously. Some claims are submitted by contractors on weak grounds or no grounds at all, but by and large the claims are in "gray areas" of the regulations. It was not necessary to distinguish whether the claims were won or lost. The Government wins a majority of the appeals filed, but the resources used to defend a case are the same for either outcome. A savings in resources can be achieved

by better regulations, either by reducing "gray area" claims or by reducing Government errors.

The regulations used were as follows:

(1) Federal Acquisition Regulations (FAR)

(2) Department of Defense Federal Acquisition Regulation Supplement (DFARS)

(3) Navy Acquisition Regulation Supplement (NARSUP)

(4) NAVFAC Contracting Manual (P-68)

These publications establish the policy used by people in the field. They are the primary references used in making decisions.

Other material is available to the contract administrator. EFD instructions, flyers, newsletters, "heads-up" messages, training course notes and the like are present in all field offices, but they are not consistant between offices. Their use varies also. The regulation system was therefore limited to the basic publications listed.

The BCA cases were selected using the Federal Legal Information Through Electronics (FLITE) System. Key word searches were made on nine topics. The topics were chosen based on the author's field experience as common areas of difficulty. The searches were limited to construction contracts. The usefulness of decisions outside of construction is limited due to differences in the general contract clauses.

Recent cases were used with some exceptions. "Recent" was defined as within the last ten years. Case law changes with time. The later cases are more useful, and have a lower chance of having been overruled or otherwise affected. Some older cases were used where needed to fully develop a particular topic. For example, the study of extended overhead must include "Eichleay Corp". Even though the case occurred in early sixties it contains a formula still contested today. Older cases were also included when they were citied as key references in a selected case. Case law does not permit the reading of a case in isolation; each case is only a part of the whole of case law. The interdependant nature of the cases required that some older cases be included.

The initial computer searches yielded 292 cases. To reduce this figure to a manageable size on about 100, a matrix of the cases was made. Some cases appeared under more than one topic. The use of these cases was maximized. This provided an efficiency since reading a single case provided data on more than one topic. The computer excerpts were scanned to select the remainder of the cases which appeared interesting. "Interesting" was defined as having wide impact throughout the field organizations. Approximately 85 cases were selected since it was known that those cases would draw in additional cases and bring the total to about 100.

The number 100 was selected based on the amount of research time available. An enormous amount of time could be devoted to a thesis of this nature. Some interesting cases have undoubtedly been missed. Nevertheless, the selected cases generated much more data than could be included in the thesis. From this point of view it was certainly adequate. A list of the cases read in their entirety is provided in Appendix B.

The topics used in the FLITE searches and the number of cases yielded by each were as follows:

TOPIC	NO. CASES
(1) Submittals	1
(2) Profit	5
(3) Payment for Stored Material	7
(4) Change Orders and Changes	9
(5) Notice to Proceed	14
(6) Acceleration	21
(7) Beneficial Occupancy	68
(8) Weather	72
(9) Extended Overhead	95
TOTAL	292

The selected cases were read in their entirety. Data was collected in three separate banks as follows:

(1) a card file, in alphabetical order by case name with the name, cite, and topics present.

(2) a case file, in alphabetical order by case name, containing rough notes and photocopies of key pages highlighting key quotations.

(3) a topic file, in order by topic, containing the related cases and key points from the cases.

Using these three files it was possible to access information quickly. The files were loose leaf to allow continued expansion at a later date.

In addition to the nine selected topics the cases yielded information on a variety of other subjects. While not a part of the original study, data was collected on the other subjects if significant.

Once the reading and data collection were completed, the topic files were compared to the relevent sections of the regulations. The central theme of the thesis was the comparision of BCA decisions with the regulations to see if the regulations were adequate to permit resolution of the problem in the case.

IV. ANALYSIS

This chapter analyses each of the nine selected topics. Conclusions and recommendations are found in Chapter V.

A. SUBMITTALS

Although only one case was found through the FLITE search, several cases mentioned submittals. The most common point made was that Government approval of a submittal does not waive the specifications unless the contractor marks the submittal as a variation. (Dimarco Corp, Sentinel Electric Co., Fortec Constructors). Quoting Sentinel Electric Co.:

> Approval of submittals does not relieve the contractor from its obligation to furnish equipment and materials that meet the specification requirements unless this fact is specifically brought to the attention of the Government or the approving officials knew or should have known that the equipment deviated from the contract requirements. {Sentinel Electric Co., p81,715}.

The timeliness of submittal review appeared in three cases. In Carney General Contractors, Inc., the contractor alleged that the Government promised to turn around critical submittals in 5 days or less. The Board held against the contractor in this case, but it brings to light some common problems. Many contracts do not specify a submittal review time, and contractors often request quick turnarounds. It is left to the contractor and Government to act "reasonably". How long is a "reasonable" submittal review?

In Carney General Contractors the Board found that a 20 day review was reasonable, given that the Architect/Engineer (A/E) was out of town. This figure cannot be used blindly. Other factors such as Government behavior, contractor behavior, or nature of the submittal can redefine the term "reasonable".

In Murphy Brothers, Inc., the contractor's incomplete submittal required correction and the contractor was responsible for the lost time. Further, a contract reqirement for the contractor to submit shop drawings at least three weeks in advance of work start did not bind the Government to a three week review limit.

No specific guidance could be found in the regulations concerning the importance or the timeliness of submittal review.

An argument can be made to specify a maximum review time for the Government. This has the advantage of defining "reasonableness" to both parties. It also makes computation of delay days simple. On the other hand, it does not recognize the reality of contracting. A finish item submittal, if submitted at the start of the job, might be returned two months later yet have no impact on the job. A critical path item might require a very tight turnaround to keep the job moving.

In the hands of a prudent contract manager the submittal time is better left undefined. This provides flexibility.

In field offices where submittals are habitually returned to the contractors late, such a clause could put the Government on notice and simplify resultant disputes. This would also help the EFD to monitor the performance of the field office.

B. PROFIT

The FLITE search found only two cases on profit. Both of these cases were Veterans Administration Board cases based on clauses different from NAVFAC's. The decisions are not considered relavent.

It was hoped that some light could be shed on the new NAVFAC weighted guidelines. The old NAVFAC policy of fixed profit on changes is now in conflict with the FAR. However, the new policy was too new to research since cases have not yet been decided on it.

C. PAYMENT FOR STORED MATERIAL

Very few cases were found which dealt with payment for stored material. The central issues are when to pay and how much to pay for stored materials.

Stored materials are those which are not yet incorporated into the work. The "Payments" clause provides that "the Contracting Officer may authorize material delivered to the site...to be taken into consideration" in preparing a pay estimate. It also states that title is transfered to the Government at the time of payment. Given that the contracting officer has discretion to pay for stored material, on what does he base his decision?

Line Power, Inc. involves a case where a field contracting office had established its own policy for payment for stored material. The contracting officer would not pay for stored material except on an "exception" basis. The Board faulted the Contracting Officer who was out of line with policy of other bases. Even though the office policy was wrong, the Government won the case through an argument over security. Since a theft of similar material had occurred, the Board upheld the Government's argument of not to pay for "security" reasons. The Government defense rested on the fact that the materail had not been properly stored to protect against theft or other damage.

In Bros Construction Company the Government first paid for stored materials, then reduced later invoices by that amount when the contractor fell behind schedule. The Board ruled that the contracting officer was within his discretion in this action.

The pre-FAR P-68 has a section which allows payment for stored material if "the contractor has clear title to such material". Paid invoices have sometimes been used in field offices to establish title. This does not accurately address all situations. Consider the case where the contractor has purchased material on account. The contractor normally acquires the material on a purchase order and agrees to pay in the future within specified terms. The contractor has title to the material, in theory, and the

supplier has an account receivable. In the event of default by the contractor, the supplier could pursue a claim to the bonding company under the payment bond.

Even though the Government is protected by the bond, the reason for payment of stored materials should be examined. The reason generally given for these payments is to save the expense to the contractor of financing the materials before they are installed. If the contractor has not paid for the materials then what is the reason to pay the contractor? The supplier is providing the financing under a routine trade agreement.

The regulations do not set a clear policy, and the author's experience does not find consistant application within NAVFAC.

D. CHANGE ORDERS AND CHANGES

1. Change Orders

Change orders, or unilaterally directed changes under the "Changes" clause, are now recognized within NAVFAC as a necessary element in good contract administration. For a discussion change orders, see Appendix C.

In M.E. McGeary, a NAVFAC Resident Officer in Charge of Construction (ROICC) was faulted for conducting a lengthy negotiation and failing to issue a unilateral change. Attitudes towards change orders must change. The proposed draft of the P-68 recognizes the change and instructs contracting officers not to delay issuance of a

change order if a bilateral agreement cannot be reached. This is true, and the reasons for it should be understood.

If a contract develops a problem, such as a design error or customer requested change, the job progress may be slowed or stopped while redesign and negotiation occur. The contracting officer must watch two things: the delay and the negotiation. He must weigh the two against each other and decide which offers the greater threat to the job. Government delays can lead to impact costs for extended overhead as well as late completion. An incomplete negotiation can lead into unforeseen costs which may exceed funds available. If a bilateral agreement cannot be reached quickly, then the contracting officer may have to pick the lesser of the two evils.

Delay costs can be a function of the length of delay, the contractor's direct and overhead costs during the delay, and the percentage of the contractor's capacity tied up on the job. To complicate matters, the Contracting Officer may not be aware of the contractor's home office overhead behavior.

The alternative is to issue a prompt change order based on the Government estimate. The risk here is that the estimate is low or incomplete. If the final cost exceeds the estimate there is the danger of exceeding the available funding, or even worse, exceeding a statutory limitation.

There is no simple answer. The contracting officer who understands the underlying problems and who takes the

time to consider both sides of the problem will be best able to decide the case at hand.

2. Accord and Satisfaction

Eleven cases involved questions concerning accord and satisfaction for changes. This indicates some confusion by both parties whether a negotiation is final and complete. Normally the change is fully compensated with respect to time and money at the signing of a bilateral modification. Where an agreement cannot be reached on the total, a bilateral modification may be issued for the amount in agreement with the contractor reserving the right to claim the difference. It should be clear to both parties whether or not the change is fully executed, but frequently it is not.

The pre-FAR P-68 spoke to this matter at 7-312 "Qualified Change Order Execution". The need to reach full agreement and the responses to conditional signatures were spelled out. The proposed P-68 does not contain this information in Part 43 "Contract Modifications", nor could the author locate it elsewhere in the manual.

Problems with "accord and satisfaction" can arise from differing views of change orders by the contractor and the Government. The contractor does not expect to bear costs for the unforeseen effects of the change and would prefer to leave the change "open". The contractor may not wish to finalize a change if he is uncertain as to the total impact of the change on the job. The uncertainty of supplers to

meet delivery dates, the uncertainty of slack on future work items, uncertainty as to compatability of the changed work with the original work--all of these factors can leave a contractor unsure of the total cost of a change. The Government should be aware of any such uncertainties or risks. The estimate and negotiations should be made accordingly. A contracting officer who blindly insists on bilaterally executing all changes for the amount of the changed costs only is being just as unrealistic as a contractor who routinely reserves impact costs on every change. Both parties should consider the risks, if any, of the change at hand and act accordingly.

The Boards' decisions provided a good variety of cases on accord and satisfaction. If the contractor freely signs the modification with no reservations, and if the modification is properly drafted including the "accord and satisfaction" words, then the issue is closed. Any reservation by the contractor, whether written or verbal, should be considered a qualification and addressed as such. The importance of good records of negotiations and memos to file are invaluable here. Records should be kept on all negotiations. The Boards place heavy weight on records made at the time of negotiation. There is no way to "ignore" a contractor's reservation of rights, and it is wishful thinking that a problem encountered in negotiation will simply go away. All disagreements must be resolved and all empasses overcome to reach finality. The use of unilateral

charge orders may be relavent and is discussed elsewhere in this thesis.

3. Time Extensions

The mechanics of drafting a modification should be considered carefully. The Boards, as well as the attorneys for both sides, had difficulty in unravelling complex changes because the time extensions were not clearly written. A modification should state the reason for the time extension, the starting and ending date for the extension, and the starting and ending date for the cause of the extension. For example: "The contract completion date is extended from 10 MAY 19XX to 25 MAY 19XX due to the trucker's strike which occurred between 1 FEB 19XX and 16 FEB 19XX." This tells the whole story. Compare it to this example: "The contract is extended 15 days". This tells nothing. The new contract completion date is unknown; the time period when the delay occurred is unknown. When a Board attempts to analyse the case it will have difficulty. All modifications must be thoughtfully and carefully written in view of what might happen down the road.

E. NOTICE TO PROCEED

This topic intended to explore any difficulties caused by the issuance of a notice to proceed, either for the contract or for a modification. The cases found with the FLITE search simply indicated that a notice to procced had been issued. No interesting disputes were found on the topic.

F. ACCELERATION

Acceleration is an increased rate of performance which would result in an earlier completion than would have otherwise been obtained. The Government has the right, via the "Changes" clause, to direct contractor acceleration. "Constructive acceleration" can occur if a Government action or inaction causes a contractor to accelerate. Failure to grant a reasonable time extension when due is an example of constructive acceleration. Acceleration or constructive acceleration under the "Changes" clause is compensable.

The "Schedules for Construction Contracts" clause also gives the Government the right to direct acceleration. If the contractor is behind schedule the contracting officer can direct acceleration, even to the point of specifically requiring more equipment, overtime, or additional shifts. Acceleration in this instance is not compensable.

The rights of the Government come from the contract itself. The FAR does not provide specific guidance on acceleration in construction contracts. The DFARS 36.271 contains limitations on the authority to accelerate jobs funded by the Military Construction Program (MILCON). The NARSUP provides no specific guidance. The pre-FAR P-68 also contains the authority limitation, and notes that a request to accelerate may take sixty days to process. A sixty day delay in processing could negate any benefit of the

acceleration. It also requires approval by a Level I Contracting Officer. If the acceleration is driven by the customer, then the customer should provide written justification for the request. The proposed P-68 did not address acceleration in Part 43 "Contract Modifications".

Only a few of the cases read addressed significant issues on acceleration. In Carney General Contractors, Inc; the Board listed the elements of constructive acceleration:

(1) existance of excusable delay

(2) contractor notification of the Government of the delay, except where:

    (a) Government directs completion without regard to the delay

    (b) supporting information is reasonably available to the Government

(3) Government failure to grant a time extension

(4) Government order to complete without time extension

(5) Contractor efforts to accelerate.

Where the contractor was slow to notify the Government of the delay, the time lost due to slow notification was not chargeable to the Government. Government pressure to complete and untimely recognition of excusable delay caused constructive acceleration.

In Titan Pacific Construction, the Government direction to accelerate was not compensable because the contractor was behind schedule. The elements of constructive acceleration are also repeated here.

In Utley-James, Inc., the Board referenced the Court of Claims in deciding that an "order" is not strictly defined. It stated that "a request to accelerate, or even an expression of concern about lagging progress, may have the same effect as an order". The contractor could not be denied the right to claim acceleration just because he finished within the contract completion date. Lastly, a contractor who makes an effort to accelerate can be compensated even if the efforts do not attain the Government ordered completion date.

In Chartwell and Associates, the Government correctly accelerated the contractor because it was able to prove that the contractor was behind schedule. The acceleration was not compensable.

In general, the cases showed good Government defense. The point to be learned from Utley-James, Inc. is how easily a constructive acceleration can be caused.

G. BENEFICIAL OCCUPANCY

The high number of cases found in the original FLITE search was misleading. If appears that most construction cases list in the "Findings of Fact" the date which Beneficial Occupancy was granted, even if the date was not a part of the dispute. This led to the high number of cases even though most were not considered significant.

No specific guidance is provided in the FAR with respect to construction contract beneficial occupancy. Liquidated damages, a related issue, are covered at 12.2 and 36.206. DFARS requires the use of liquidated damages on construction contracts over $25,000 at 32.206. The pre-FAR P-68 addresses acceptance and final inspection at 6-501, but the information relates more to organizing a formal final inspection for jobs over $50,000. The draft P-68 expands this paragraph at 46.506 and raises the dollar threshhold to $100,000. The NFCTC "Construction Contract Administration and Management" Course sets the establishment of the Beneficial Occupancy Date (BOD) as a responsibility of the Assistant Resident Officer in Charge of Construction (AROICC) before final acceptance.

The real question on setting the BOD is "How much is enough?". The BOD is an important date because it stops the clock on liquidated damages if it occurs after the contract completion date. Making a judgement call such as the BOD is difficult. The cases reviewed helped to shed light on the subject.

In DiMarco Corp., a contract that was 96% complete was not usably complete because an inoperable vehicle lift in a vehicle repair facility rendered the facility incapable of serving its intended use.

Similarly in Fortec Contruction, the Government was correct in denying beneficial occupancy where the buildings boiler and fire alarm system were inoperable.

In Wickham Contracting, 86-2, 18.887 the Government was ruled to have established beneficial occupancy when it took possession at 95% completion. Occupancy combined with a small percentage of uncompleted work led the Board to decide that the facility was usable.

In Hargis Construction Co., Inc., neither party had records of when the BOD occurred. The Board set the BOD using the records presented. Basically, the Board started with a known joint inspection date and added sufficient time estimated to allow the contractor to complete the significant deficiencies.

In Lemar Construction Co., the contract included three distinct work items. The Government assigned partial BOD to two of the items and failed to address the third. The Board, looking for an overall BOD, chose a date earlier than either partial BOD date.

In summary, the Board appears willing to deny BOD any time that a significant aspect of a facility is incomplete. An item which renders the facility unusable for its intended purpose is significant regardless of the percentage complete. Government occupancy of a facility can undermine an argument that it is unusable. The Government should document the date it felt beneficial occupancy occurred and give reasons supporting that date. Records from the time of occurance are weighed heavily.

H. WEATHER DELAYS

Weather delays are drawn from the "Default" clause of the contract. The clause states that "unusually severe weather" which delays performance entitles the contractor to a time extension. Compensation is not provided for.

The FLITE search found numorous weather delay cases. Even though the clause is brief and relatively clear it still generates many claims. For this reason it should be examined.

Appendix D provides a detailed look at weather delays, along with quotations from cases which help define the arguments. Appendix D should be reviewed before proceeding with this section.

Guidance on weather delays is limited. The draft P-68 contains information at 12.107 which requires that the contractor make a detailed explanation of the claim. The phrases regarding allowability of days only in excess of established averages is carried over from the pre-FAR P-68.

One concept that is not clearly defined is the requirement to establish how the unusually severe weather affected the job. From Appendix D the elements of a weather delay are:

(1) the occurrence of unusually severe weather (beyond historical averages)

(2) the effect of the unusually severe weather on the work.

Most field offices are able to calculate the difference between an actual figure and the average figure, but the analysis of impact needs to be reinforced. As the Board found in Pacific Western Construction, "the effect of the weather and not the weather, per se, is the key".

I. EXTENDED OVERHEAD

Numerous extended overhead cases were found. The claims tended to be messy and complex. The Boards have grappled with the issue many times and seemingly conflicting ideas emerge. Why is extended overhead so complex? Perhaps one reason is that home office overhead allocation is arbitrary. Any attempt to rationalize its behavior cannot escape this fundamental concept. Arguments whether one arbitrary method is preferred over another arbitrary method can become vague.

To understand extended overhead, one must have some knowledge of accounting principles with regard to overhead allocation. This is not always the case for engineers, inspectors, or contract administrators. Even worse, it is not always the case for attorneys or judges, either.

Appendix E contains the thesis analysis for extended overhead. Appendix F contains a summary of the Capital Electric case, a landmark case in extended overhaed. The Appendices should be read at this point. An explanation of an accounting perspective of indirect costs in not possible in this thesis, yet it is necessary to understand the arguments on extended overhead. This missing link in education is a fundamental cause of the problem.

V. CONCLUSIONS AND RECOMMENDATIONS

A. GENERAL CONCLUSIONS

The decisions of the Boards of Contract Appeal are an excellent source of information which should be used to continuously update the regulations. At the start of the thesis, the decisions were regarded as an output of the system with a potential for feedback. Perhaps this association is not enough, and should be strengthened. The diagram below is better, where the two are inexorably linked. The regulations form the behavior which produces the cases, then the decisions form the behavior which produces the regulations.

Looking to the regulations, where does the theory of contract administration belong? To research a single topic required a frustrating search through four volumes of regulations and numerous course outlines. Even after this effort, the essential tools for decision making were still absent sometimes. The process is inefficient. Maintenance and updating for this web of information is cumbersome. Is there a better way?

A single NAVFAC publication is one possible solution. It could combine regulation with theory. Training courses could then focus on the manual itself without introducing more volumes of paper. Students could return to the field and use the manual directly with their acquired understanding, thus eliminating the course outlines. The P-68 is a logical starting point for such a manual, since it is one of the most frequently used document in field offices.

Another alternative could be the inclusion of all regulations by DOD, the Navy, and NAVFAC into the FAR binder. A single subject would be kept intact and available in one location. Colored pages or a similar device would alert the reader as to the origin of the requirement. By including NAVFAC regulations along with the FAR, the P-68 would be free to become a manual of theory and good practice.

There are other possiblities for organizing a collection of data. The whole problem should be reviewed in terms of information collection and display. Manpower and funding constraints for any such reorganization is a recognized limitation.

The decisions of the Boards of Contract Appeal must be used to maintain the regulations used in construction contract administration. The cases themselves, although long and tedious, contain concepts, the essence of which must be conveyed to the field.

This thesis is in no way comprehensive. The relatively small number of cases chosen and the limited time available provide an illustrative spot check on the system. Continuous, methodical checks must be made to keep the regulations abreast of changes in the system.

The P-68 is the most commonly used publication at the field activities, and the only publication targeted specifically at NAVFAC construction contracting. The P-68 is an important source for both regulation and explanation. In a decentralized organization such as NAVFAC, the P-68 can influence the overall quality of contract administration. A permanent, structured method to recognize and incorporate change, including those evolving from the Boards of Contract Appeal is essential.

B. RECOMMENDATIONS BY TOPIC

1. Submittals

Submittal reviews should be addressed in the P-68. Both the value and the timeliness of the reviews should be stressed. A paragraph could be included at Appendix B of the draft if not there already. Appendix B of the draft was not available to the author during the conduct of research for the thesis.

One difficulty which hampers submittal review is the difficulty in getting the submittal log from the contractor early in the job. A possible solution would be to have the architect/engineer (A/E) provide the submittal log. The A/E

chooses the submittals required as he writes the specification, and is the most knowledgeable person on the subject. The submittal process could be speeded up by giving the contractor the submittal log at the pre-construction conference. The A/E would fill in the items required and the specification reference. The contractor would have only to fill in the submttal dates to complete the log according to his schedule. This could speed up procurement at the start of the job where time is frequently lost. Also, the designer has incentive to make a complete list, while the contractor may be motivated to omit items to reduce paperwork or hide substandard material.

2. Profit

No conclusions were drawn regarding the new weighted guidelines due to the lack of supporting cases.

3. Payment for Stored Material

Policy for payment for stored material should be consistent throughout NAVFAC. The case in which a field office made up its own policy underscores the need for better guidance. The discretion provided to the contracting officer should be preserved, but some explanation of the theory behind the discretion is necessary. The guidance in the draft P-68 at 32.506(c) should be expanded to address the following issues:

(1) Are paid invoices required?

(2) Should stored materials be paid on jobs where no payment bond exists to protect suppliers?

(3) What is the correct amount to pay? Is it the "paid invoice" amount? Is it the full schedule of prices amount? Is it the schedule of prices amount minus ten percent overhead and profit? What about trade discounts?

The clause and the P-68 give discretion but no guidance on how to exercise the discretion. This information should be added to the P-68. The theory and good practice should also be included in the training courses.

4. Change Orders and Changes

The need for change orders has been recognized by NAVFAC and guidance provided to the field by the draft P-68. It will take some time for field personnel to change their habits and attitudes. NAVFAC should monitor this change. Since time is critical to the use of change orders, slowness to act by field personnel or the EFD's can negate any benefit which might have been obtained. Training courses and EFD memorandums to the field should be used to set the foundation for the new mentality.

The number of disputes involving "accord and satisfaction" was not expected. It clearly shows an area where improved guidance is needed. Part 43 "Contract Modifications" of the P-68 should be expanded to include the standard "accord and satisfaction" wording as well as instructions on what to do in the event the contractor refuses to execute a modification. It is important to

acknowledge that this may happen, and to guide field personnel to seek a solution or at least to understand the contractor's concerns. Field personnel who treat every reservation of rights as contractor manipulation will create adversarial roles in cases where the contractor's concerns have merit. The need to investigate and understand the situation should be stressed.

The need to properly draft modifications to fully describe time extensions should be added to the draft P-68 at 12.107 "Construction Contracts Time Extensions Not Related to Changes in Work" and to 43.207 "Allowable Change Order Formats".

5. Notice to Proceed

No conclusions were drawn on this topic due to the lack of significant cases available.

6. Acceleration

No significant weaknesses in the regulations were noted from the cases. The definition and the elements of acceleration and constructive acceleration should be available in the P-68. The most appropriate place to put this would be under Part 12 "Contract Delivery or Performance". A caution should be given to the results of failing to respond in a timely manner to all contractor requests for time. The wording should also warn that expressions of concern for early occupancy can be interpreted against the Government.

7. Beneficial Occupancy

A paragraph on the nature of the beneficial occupancy date (BOD) should be added to the P-68 at 46.506-1. The paragraph should state that any significant item which causes the building to be unsuited for its intended use is adequate to withold the BOD. Examples should be given for some items commonly late in completion such as fire protection devices, secure exterior hardware, vital equipment, etc. The effect of moving into the facility on beneficial occupancy should be explained. Lastly, a word of caution should be given on withholding the BOD when only minor work remains.

8. Weather Delays

The P-68 should be expanded at 12.107 to call attention to the "effect" of unusually severe weather on performance, as opposed to a simple calculation of "actual days minus average days". Contract people should be thinking in terms of the impact of the unusually severe weather on the job as well as counting days. Claims should be addressed in two distinct steps. First the calculation should establish the amount of unusually severe weather, i.e. the number of days above historical average. The second step is to evaluate the impact that these excess days had on job performance. Two extra days of rain does not automatically equate to a two day time extension; it could lead to a five day delay or even no delay at all. Look for the impact, and document it in the files.

9. Extended Overhead

The P-68 should state at 15.800(j) what to do in the event that the value of construction and time are not in proportion to each other. Even if a thorough understanding of overhead accounting is not possible, contract people should at least be aware of the two basic approached to overhead computations for delays. Both the "percentage of cost" and the daily rate formulas should be presented.

A paragraph should be added to Part 42 "Contract Administration" stressing the importance of timely action on submittals, changes, and contractor correspondence. The causes of Government delays should be listed plainly since delays are the cause of extended overhead.

Finally, a training course block should be developed at NFCTC which would explain the concepts involved in indirect cost allocation from an accounting viewpoint. The course should be aimed at middle and senior personnel levels. Input for the course should come from a combination sources including NAVFAC contracting, accounting, and legal disciplines.

APPENDIX A

THE BOARDS OF CONTRACT APPEALS

INTRODUCTION

The normal channels through which people pursue their grievances against one another are the courts. The judicial process is formal and complex. An assumption is that both parties are free and equal before the law. A complication arises when one party is not equal, such as the United States Government. The Government is a sovereign state. Its powers, if levied freely, are so great that they would create an unbeatable business opponent for private firms. In order to create a fair arena in which the government can acquire those things it needs, the Government willingly gives up a portion of its power as a soverign. In doing so it becomes a satisfactory partner with private enterprize.

In any business it is reasonable to assume that disputes will arise. While the principal method of resolving such disputes is in court, there is an alternative for those involved in contracts with the Government. The alternative is through a Board of Contract Appeals.

The Boards of Contract Appeals are not courts. They do not belong to the Judicial Branch of the Government. They belong to the Executive Branch. The Armed Services Board of Contract Appeals (ASBCA), for example, is a part of the Department of Defense. It is established by the Secretary of

Defense. Each major contracting agency (such as NASA, GSA, HUD, etc.) has a Board of Contract Appeals (BCA). The Armed Services Board of Contract Appeals (ASBCA) is the largest board.

Why have a Board of Contract Appeals? If the Board is simply an extension of the contracting agency, then why insert this additional step between the contractor and the judicial system? The courts can be a time consuming and expensive remedy for disputes. It serves the Government and the contractor to have a simpler solution.

Whether or not the Boards are quick and inexpensive is subject to debate. The Boards are faced with a wide spectrum of cases, from a simple issue to technically complex cases involving millions of dollars, and even to questions involving interpretation of the law itself. Can a single Board respond to this broad tasking? This is a central issue in the Boards' history and their present operation. It is the intent of this appendix to review the evolution of the Boards, their composition, and the rules under which they operate.

PRIOR TO THE DISPUTES ACT

The Contract Disputes Act of 1978 formally established the Boards of Contract Appeals. Prior to the Disputes Act, the Boards were created by the Disputes Clause contained in the contracts of the day. That clause stated that, after a Contracting Officer's final decision (COFD), the decision would be:

> final and conclusive, unless, within 30 days from the date of receipt of such copy, the contractor mails or otherwise furnishes to the Contracting Officer a written appeal addressed to the Secretary.

The contractor could request an admimistrative review of his complaint at a level above the contracting officer, yet still within the agency. This allowed the Agency an oversight capability for its Contracting Officers.

The appeal would be answered by the Secretary or his duly appointed representative. The obvious fact that the Secretary would not personally review each case resulted in the creation of the Boards of Contract Appeals.

The jurisdiction of the Boards also came from the Disputes Clause. It stated that "any dispute concerning a question of fact" would be decided by the Contracting Officer and that this decision was subject to appeal. Questions of law were beyond the Boards finality. The Clause stated:

> This "Disputes" clause does not preclude considerations of law questions...provided that nothing in this contract shall be construed as making final the decision of any administrative official, representative, or board on a question of law.

The Boards had final authority on questions of fact, but not on questions of law.

The procedures of the Board came from the clause as well. The clause provided that:

> In connection with any appeal proceeding under this cluase, the contractor shall be afforded an opportunity to be heard and to offer evidence in support of his appeal.

The simple wording did little to define the operating procedures of the Boards. Whatever was lacking in the clause was defined, eventually, through case law by the Boards and courts. The concept of "presumptive validity", for example, has no formal definition in the clause but was set by case law. "Presumptive validity" means that the Boards are not limited by the Contracting Officer's final decision, and must investigate the case from the start.

The ability to request a hearing and offer evidence is significant. Even though the hearings were not as formal as a court, they did offer the contractor the opportunity to plead his case before an impartial board. The level of formality required of the Board was subject to debate. It stood to reason that small contractors appealling small claims, often without counsel, would prefer informal proceedings. Larger contractors appealling complex questions would seek formal proceedings allowing full

discovery and due process. This was especially true since it was the final forum in which a contractor could present and argue his position on questions of fact. The dichotomy of needs for a quick and responsive system, yet a thorough and deliberate system, persists even today.

How well the Boards met these needs was also a point of debate. The 1972 Commission on Government Procurement reviewed the functions and operations of the Boards. According to Cibinic and Nash:

> The 1972 Report of the Commission on Government procurement found, among other things, that the boards as then constituted were ill-equipped to afford complete and adequate relief in complex cases. ...Government employees serving on these boards had no tenure but were civil service employees or military officers under the control of the head of the agency. Caseloads per member varied substantially. The commission was critical of this diversity among the boards and recommended that more uniform minimum standards be established for board personnel and caseloads. (John Cibinic, Jr. and Ralph C. Nash, Jr., Government Contract Claims, George Washington University, 1981, Chap. 6)

The Commission's report highlighted the negative aspects of the Boards. It opened the floor for debate and eventually led to the Contracts Disputes Act, which gave the system the definition and structure that it has today.

The Board of Contract Appeals

Rather than defining itself through the disputes clause, agency regulations and precedent cases, the Board of Contract Appeals is now formally created by an act of Congress through the Contract Disputes Act of 1978.

The Boards of Contract Appeal are still located under the agency head. In order to equalize the Boards and set minimum standards the Act contained specific language regarding the number and qualifications of the judges. The Act required that the members of the Board be civil service employees at the GS-16 level or higher. The establishment of full-time, civilian Board members was intended to give strength and consistency to the Boards. In addition to the minimum grade levels, the act required that each Board member would be an attorney at law with at least five years experience in public contract law. The members of the Board were designated as administrative judges. They would be appointed within the agencies, usually at the undersecretary or assistant-secretary level.

The number of members on each Board would be derived from manpower studies performed by the Office of Federal Procurement Policy (OFPP). Such manpower studies would be performed cyclicly at three year intervals. The initial manpower study issued in 1979 set the number of members for the Armed Services Board of Contract Appeals at thiry-three.

A more recent study has confirmed that the caseloads have grown rapidly since the passage of the Contract Disputes Act in 1978. Speculative reasons for the increase include economic trends, perceived rises in court costs, better educated contractors, or a generally more litigatious society. Upon completion of the current study by OFPP the number of judges will be under increased pressure to rise. Furthermore, in an attempt to best use the talents of the judges, efforts are being made to delegate downward to non-member lawyers and paralegals any routine business which does not require the expertise of a judge.

The jurisdiction of the Boards of Contract Appeals was expanded by the Contrct Disputes Act. Under the old Disputes clause the Boards were limited to "questions of fact arising under the contract".

The words "arising under the contract" were defined as a "claim that can be resolved under a contract clause that provides for the relief sought by the claimant". Omitted are issues which are not addressed in the contract itself. The new "Disputes" clause has been expanded to include issues "arising under or related to this contract". The definition of items "related to" the contract has been defined under the Act to include contract reformation, rescission, breach of contract, debarments, suspensions, patent hearings, and grant disputes. The Boards are authorized to grant any form of relief currently available to the Court of Claims. (Cibinic and Nash, supra)

The words "question of fact" had been defined to exclude questions of law. This limited definition does not appear in the new clause. The result of these changes has been to expand the authority of the Boards to almost any dispute which may occur on a contract.

An important characteristic of the Boards is that they are appellate in nature. The Boards will not hear any dispute until a final decision has been given by the Contracing Officer. To function in any other manner would undermine the role of the Contracting Officer. An exception to this rule can occur if the Board finds that the Contracting Officer has failed to issue a final decision in a timely manner or otherwise assumed an adversarial role towards the contractor.

The Boards are not the only forum available to the contractor. The Contract Disputes Act provides that the contractor may take the claim directly to Court of Claims. The choice lies solely with the contractor. A contractor who feels the nature of his claim is such that the legal questions raised will reach the judicial branch in the end need not expend time and effort before the Board. He may appeal directly to the courts.

The Board of Contract Appeals is the less formal of the two forums. The rules and procedures which guide the Boards are much simpler than the courts. The cost of taking a case to the Boards is generally less than the courts. This

is true partially because legal counsel is not required for the contractor before the Boards; the contractor may speak for himself. Even if counsel is used, the amount of legal time is generally less than in the courts.

The filing periods differ between the Boards and the courts. A contractor must file his appeal to a Board of Contract Appeals within 90 days after the receipt of the final decision. An appeal may be filed with the Court of Claims up to 12 months after the final decision. If a contractor appeals a final decision after 90 days have elapsed, he is limited to the Courts of Claims.

The Contract Disputes Act gave the Government the right to appeal a decision of the Board of Contract Appeals. This option did not exist prior to the Act. The contracting agency involved can appeal a Board's decision, subject to the approval of the Justice Department.

The Board of Contract Appeal does not simply review the final decision of the Contracting Officer. The Board has the responsibility to review from the ground up all aspects of the issue at hand. There are no limitations imposed by either the final decision or the evidence that the decision was based on. Quite the opposite, the Board is bound to uncover any and all evidence related to the issue and to base its decision accordingly. This concept is known as "de novo", from Latin meaning "from the start". To meet this responsibility the Contract Disputes Act gave the Boards the power to subpoena witnesses and the production of

documents. Failure to respond to the subpoena can result in contempt of court and the assessment of fines.

The following list highlights the methods by which the Boards may accumulate information which will form the record upon which the decision will ultimately be based.

(a) The "Rule 4 File": Rule 4 of the Board Rules requires that the Contracting Officer assemble all specifications, drawings, and correspondence plus complete copies of the contract documents. Three identical copies are made for the Board, the contractor, and the Government defense. The contractor has the opportunity to review this file and request that the Board reject any documents that he feels are misleading or irrelavent. The Board may choose to do so based on its own review. The "Rule 4" documents then become a part of the record. Thus, the Board and the contractor have access to all written files held by the Contracting Officer.

(b) Discovery: The Boards allow an ample period of time for discovery between the two parties. The purpose for this is for the parties to agree on as much common ground as possible, and to reduce the arguement to clear positions of disagreement which are passed to the Board for decision. Unlike Perry Mason, the Boards do not enjoy surprise from last minute presentations of evidence. Through written requests for information called "interrogatories" the parties can obtain any documents or statements needed in developing their case.

(c) Hearings: The hearing gives the contractor "his day in court". Both sides are free to introduce evidence and to take testimony from witnesses under oath. Witnesses are classed as either "witnesses of fact" or as "expert witnesses". Witnesses of fact can tell what they know to have happened. Experts witnesses must first demonstrate their qualifications to the judge. For engineers, registration is an obvious question. After qualification, an expert may speak to practices within his field. After the initial questions to a witness, a period of cross-examination is available to both parties to clarify anything the witness covered. Furthermore, the judge himself can ask the witness questions at any time to bring out key points of the case. This "live" testimony under oath with cross-examination is weighed heavily as evidence. Transcripts are made and become a part of the record.

(d) Subpoena: Should one party have difficulty in obtaining documents or witnesses, the Board has the power to subpoena. This is an important tool in insuring the exposure of all relavent information.

(e) Briefs: The counsels for both parties may give pre-hearing briefs, post-hearing briefs, or both. This gives both attorneys a chance to develop their arguements to the judge. They are a key document in complex cases to draw the judge's attention to the main issues of the case from the mountain of data in the record.

(f) Depositions: For people who cannot attend the hearing, written depositions may be taken under oath. These do not carry the same weight as live testimony because of the lack of cross-examination. It is very important to have all key witnesses on the stand.

From the above list it can be imagined that the Boards lack little in terms of ability to discover the facts of the case. One item is missing, however. The judge was not present to see the actual occurrences. The ability of the judge to decide correctly rests on the participants in the case. The attorneys, the contractor representatives, and the Government representatives play vital roles in molding the decision.

Having accumulated all possible information bearing on the case, the Board will close the record, weigh the evidence, and make its decision. The decision will be based on the preponderance of evidence in the record. This does not automatically equate to the "right" decision. Cases can be lost if either side fails to clearly explain its point of view. Being "right" is not enough; the evidence of being right must be put before the judge and made a part of the record.

Another result of the Contract Disputes Act has been increased judicialization. This is either beneficial or damaging, depending on your point of view. One of the central issues is the Boards' requirement to hear a wide spectrum of case complexities. While increased judicialization would give better consideration to the more complex cases, it represents lost time and energy for smaller cases. The requirement to respond to the smaller cases was understood by the authors of the Act. Two special procedures are available for smaller claims: the Accelerated Procedure and the Expidited Procedure.

Entry into the Accelerated or Expidited Procedures is the option of the contractor. This is in keeping with the philosphy that the contractor has the freedom to select the forum.

The Small Claims (Expidited) Procedure, as it is formally known, can apply only to claims having a disputed amount of $10,000 or less. The contractor may elect to use the Expidited Procedure by notifying the Board in writing within 60 days after receipt of the notice of docketing. The Board then has the responsibility to issue its decision within 120 days after the contractor's election to use this method. The main elements of the process remain intact: The contractor may still have a hearing; the government must provide the "Rule 4 documents". The discovery and prehearing processes may be streamlined or eliminated, if possible, by

telephone contact between the Board and the parties to focus on the central argument. The written decision will be brief and may be given by a single judge. If a hearing is held, the judge can issue a verbal decision on the spot and follow it up with a written decision. DECISIONS ISSUED UNDER THE EXPIDITED PROCEDURE HAVE NO PRECEDENT VALUE. The Act recognized that the speed and informality of the process do not qualify as a legal precedent for use in other cases.

The Accelerated Procedure provides an intermediate procedure more formal than the expidited, yet faster and less formal than the regular procedures. Again the option lies with the contractor. The Board must issue its decision within 180 days after the contractor chooses this method. The Accelerated Procedure may be requested only if the amount of the dispute is $50,000 or less. Decisions will normally be made by a single judge with the approval of the Board Vice-Chairman. In disputes involving $10,000 or less the judge may issue a verbal decision at the close of the hearing similar to the expidited procedure.

Thus the contractor has three options to best match his needs, and the Board of Contract Appeals fulfills its responsibility in deciding the full spectrum of complexity and size of cases.

In summary, the Board of Contract Appeals is an administrative body, above the Contracting Officer but still within the agency. It is intended to resolve the majority of

contract disputes without going ot the Judicial Branch, and it does so. The rules and procedures are simpler and more flexible than the courts so that it can respond to the wide variety of cases brought before it. It has finality on questions of fact, but not on questions of law. The existance of the Contract Boards of Appeal is a clear demonstration of the Government's desire to be a reasonable partner with private enterprize.

Activity contracting personnel should regard the ASBCA as a rational process for resolving disputes. No claim should be given away due to fear or misunderstanding of the process. However, EVERY EFFORT MUST BE MADE TO RESOLVE PROBLEMS WITHOUT GOING TO THE BOARDS. The heavy workload of the Boards should be understood, as well as the Government resources available to defend a case. Only a finite amount of counsel is available to defend Government cases. If avoidable claims are pushed into the Board for personality reasons or simple stubborness by Government personnel, then somewhere else a legitimate case will suffer. The best people to decide a dispute are those closest to it. Raising the dipute to a higher level will certainly get an unbiased decision, but the decision is frequently no better than what the parties could have arrived at on their own.

APPENDIX B

LIST OF BCA CASES

1. Algernon-Blair, Inc.; 82-2; 15,859.
2. Algernon-Blair, Inc.; 87-1; 19,602.
3. Allegheny Sportswear Co.; 58-1; 1684.
4. American Combustion, Inc.; 86-3; 19,296.
5. American Combustion, Inc.; 87-1; 19,539.
6. American Household Storage Co.; 86-3; 19,201.
7. Fred A. Arnold; 84-3; 17,021.
8. Fred A. Arnold; 86-1; 18,701.
9. Arntz Brothers, et al; 79-2; 14,008.
10. J.W. Bateson Company, Inc.; 78-2; 10,340.
11. BECO, Inc.; 86-3; 19,211.
12. J. J. Bonavaire Company; 86-2; 18,788.
13. Bros Construction Company; 78-1; 13,067.
14. Capital Electric; 83-2; 16,548.
15. Capital Electric; 84-2; 17,051.
16. Carney General Contractors, Inc.; 79-1; 13,855.
17. Cavanagh Company; 86-2; 18,878.
18. Chartwell and Associates; 86-3; 19,355.
19. Coliseum Construction, Inc.; 86-2; 18,857.
20. Colton Construction Co.; 83-1; 16,220.
21. Jack Cooper Construction Co., Inc.; 84-3; 17,703.
22. Dawson Construction Co., Inc.; 79-2; 13,989.
23. DiMarco Corporation; 85-2; 17,982.
24. DiMarco Corporation; 87-1; 19,456.

25. El Dorado Construction, Inc.; 86-1; 18,658.

26. Eichleay Corp.; 60-2; 2688.

27. Elrich Construction Company, Inc.; 87-1; 19,600.

28. Excavation-Construction, Inc.; 83-1; 16,293.

29. Excavation-Construction, Inc.; 86-1; 18,638.

30. Excavation-Construction, Inc.; 86-2; 18,747.

31. Excavation-Construction, Inc.; 87-1; 19,516.

32. Fisk Building and Investments; 85-1; 17,888.

33. Fortec Constructors; 83-1; 16,374.

34. Fortec Constructors; 83-1; 16,402.

35. Fortec Constructors; 85-2; 17,972.

36. General Railway Signal Company; 85-2; 17,959.

37. Giuliani Contracting Co., Inc.; 87-1; 19,339.

38. Globe Engineering Co.; 83-1; 16,370.

39. Good Construction Co.; 86-2; 18,912.

40. G & S Construction, Inc.; 86-1; 18,740.

41. Hargis Construction Co.,Inc.; 86-3; 19,220.

42. George Hyman Construction Co.; 85-1; 17,847.

43. Jen-Bek Associates, Inc.; 87-2; 19,760.

44. Jones Plumbing and Heating, Inc.; 86-1; 18,659.

45. Bryce W. Jorgensen; 87-1; 19,464.

46. LeMar Construction Company; 87-1; 19,508.

47. LeMar Construction Company; 87-1; 19,657.

48. Line Power, Inc.; 83-1; 16,253.

49. Line Power, Inc.; 83-2; 16,725.

50. Lite Manufacturing Co.; 58-2; 2009.

51. Fred Loffredo; 82-1; 15,509.

52. C. E. Lowther; 85-2; 18,149.

53. H. B. Mac, Inc.; 86-3; 19,145.

54. Massman Construction Co.; 81-1; 15,049.

55. Massman Construction Co.; 86-2; 18,766.

56. M. E. McGeary Company; 86-3; 19,038.

57. Roy McGinnis & Company, Inc.; 86-3; 19,165.

58. Louis M. McMaster, Inc.; 86-3; 19,067.

59. Miles Construction; 84-1; 16,967.

60. Montgomery-Ross Fisher, Inc.; 84-2; 17,492.

61. M. A. Mortenson Company; 87-2; 19,718.

62. D. L. Muns Engineering and Building Contractors; 87-2; 19,709.

63. Murphy Brothers, Inc.; 86-2; 18,774.

64. Pacific Western Construction, Inc.; 86-2; 18,816.

65. Pan Arctic Corporation; 77-1; 12,514.

66. Pathman Construction Co.; 85-2; 18,096.

67. Leonard Pevar Company; 84-3; 17,591.

68. Preston-Brady Co., Inc.; 86-2; 18,860.

69. Preston-Brady Co., Inc.; 86-3; 19,127.

70. Ricway, Inc.; 86-2; 18,841.

71. Ricway, Inc.; 86-3; 19,218.

72. Rivera-Cotty Corporation; 86-3; 19,148.

73. R. W. Contracting, Inc.; 84-2; 17,302.

74. Santa Fe Engineers, Inc.; 81-2; 15,261.

75. Sentinel Electric Company; 83-1; 16,426.

76. Seven Science Industries; 80-2; 14,513.

77. Shipco General; 86-2; 18,973.

78. Structural Services; 82-2; 15,890.

79. Sweetwater Landscape and Nursery,Inc; 85-1; 17,804.

80. T. H. Taylor, Inc.; 86-2; 18,743.

81. Techcraft Systems; 86-3; 19,320.

82. Nello L. Teer Co.; 86-3; 19,326.

83. Teller Environmental Systems, Inc.; 85-2; 18,025.

84. TGC Contracting Corp.; 86-1; 18,699.

85. Therm-Air Manufacturing Company, Inc.; 73-1; 9983.

86. Titan Mountain States Construction Corp.; 85-1; 17,931.

87. Titan Pacific Construction Corp.; 87-1; 19,626.

88. Tri-Messine Construction Co., Inc.; 82-1; 15,735.

89. Utley-James, Inc.; 85-1; 17,816.

90. VEPCO, Inc.; 84-2; 17,255.

91. Whitesell-Green; 85-1; 17,934.

92. Wickham Contracting Co., Inc.; 86-2; 18,887.

93. Worsham Construction Company, Inc.; 85-2; 18,016.

94. Wylie Brothers Contracting Co.; 84-1; 17,078.

95. XPLO Corporation; 86-2; 18,863.

96. XPLO Corporation; 86-2; 18,867.

97. D. W. Young Construction Co., Inc.; 87-2; 19,762.

98. Zinger Construction Co.; 84-1; 16,993.

APPENDIX C

CHANGE ORDERS

There is a growing awareness of the differences in terminology and concepts of "change orders" between the NAVFAC community and the FAR definition in use by other agencies. A "change order" in the old sense covered both in-scope bilateral changes and unilateral changes under the "Changes" clause, while a "supplemental agreement" was generally construed to be an out-of-scope, bilateral change. This contrasts with the FAR definition which defines a "modification" as "any written change" to the contract and divides this broad term into two categories: "change orders" referring to unilateral changes under the "Changes" clause and "supplemental agreements" which include bilateral changes. There is a temptation within NAVFAC to cling to the old terminology. According to the NAVFAC Contracts Training Center (NFCTC) "Construction Contract Modifications" course the new definitions run "counter to the tradition and practice of constructors who are more used to the terminologies and distinctions differentiating contract change orders and supplemental agreements". {Course Text, p. II-A1, 5 of 11} Since one of the major intents of the FAR was to make Federal procurement terminology more consistent, it would seem contrary to retain conflicting, and somewhat confusing, definitions within NAVFAC.

A. CHANGE ORDER POLICY

The issue here is not terminology. The real issue is one of policy. The FAR definitions carry different perspectives towards the use of unilateral change orders, not simply a change in semantics.

1. NAVFAC Policy

The previous policy within NAVFAC on unilateral change orders was set forth in the P-68 as follows: "A total unilateral change order should be issued only as a last resort." (P-68, FEB 1985, p. 7.3.7) Approval authority was reserved at the EFD level, one level above the contracting officer. EFD personnel, and people within NAVFAC generally, considered the unilateral change to be an extreme tool and it was seldom used.

2. FAR Policy

FAR policy regarding the use of unilateral change orders appears at paragraph 43.102(b) where it states:

> Contract modifications,including changes that could be issued unilaterally, shall be priced before their execution if this can be done without adversely affecting the Government. If a significant cost increase could result from a contract modification and time does not permit negotiation of a price, at least a maximum price shall be negotiated unless impractical. (FAR 43.102(b))

The FAR discusses a related issue at paragraph 43.203 regarding accounting procedures for changes. If a unilateral change order is issued, the costs incurred by the contractor towards executing the changed work become very important.

These costs should be tracked separately. There is a FAR clause for this purpose but it is not normally found in the NAVFAC General Provisions.

3. DOD Policy

The DOD policy regarding change orders is found paragraph 43.201 of the DOD Supplement to the FAR, where it states that "procedures are necessary to ... promote the policy of forward pricing of changes when feasible" and to "equitably adjust the contract in a single, final, and complete supplemental agreement." Clearly, a bilateral modification is desirable over a change order.

4. Navy Policy

The Navy policy is set out in the Navy Acquisition Regulation Supplement (NARSUP) at paragraph 43.204(91) as follows:

> No modification shall be issued unless it is sufficiently definitive that the Contractor is willing to and does obligate the contractor to total performance within a stated period for a maximum dollar amount which bears a reasonable relationship to the work to be performed.... In addition all such modifications shall contain a milestone schedule which culminates in a mutually agreed date upon which definitization will occur. {NARSUP, 43.204(91)}

Putting the different regulatory pieces together, agencies above the NAVFAC level give the following guidance on the use of change orders:

1) Bilateral is better than unilateral, generally.

2) If unilateral action is better for the case at hand, then do it.

3) If a change order must be used, it should contain time and cost limits, and a schedule to definitize.

5. NAVFAC'S Proposed Policy

A different concept of change orders is given in the draft P-68 at paragraph 43.207. The "last resort" concept is dropped. It now reads that "Contracting Officers should not postpone issuance of modifications because of failure to reach agreement (on price and time)....The letter of direction shall fix an authorized not to exceed cost." The not to exceed requirement is given with the recognition that this figure might not "legally limit the Government's liability to such an amount". EFD approval is still required for all such actions.

B. ASBCA CASE

Given the bare framework of the policy, how should change orders be used in a day-to-day, working environment? One recent case in the ASBCA highlights an instance where the ROICC's unwillingness to issue a unilateral change order led to an decision against the Government. On contract N62474-83-C-7875 for an underground tank at Coronado, California, the ROICC requested a proposal from the contractor for a change. The ROICC then entered a lengthy negotiation requiring the contractor to resubmit revised proposals. The Board found the ROICC's actions improper because a change order was not issued. The following text is taken from the decision, and the philosophy of the Board should be noted:

> The record reflects that, due to a change in the EPA regulations, the Government decided to modify the contract requirements to have the fuel storage tanks underground. Rather than issuing a change order, however, the Government asked the appellant for a cost proposal to accomplish the revised requirements. Government dissatisfaction with the appellant's estimate led it to ask the appellant for revised cost proposals and, at no time, did the Government issue a unilateral contract using its own estimate, which it never disclosed to appellant. By its actions and ommissions, the Government delayed appellant's performance and is responsible for any increased cost which appellant can establish resulted from that delay....
>
> While it has been held that the costs of preparing a cost proposal for a change is not recoverable, ... recovery has been permitted where the effort requested by the Government was extrordinary.... In the instant case appellant's effort was not highly complex in nature but, due to the protracted period of time over which appellant was developing proposals in the absence of a change order, we conclude that appellant is entitled to recover its costs. (M.E. McGeary Co.; 86-3; 96,038)

By having failed to act in either of the available modes, i.e. to either settle the negotiation or issue a unilateral change order, the Government gave the contractor entitlement to delay costs. Furthermore, its actions were so gross as to provoke the Board into granting the costs of preparing the proposal, a cost rarely given to contractors. The Board's position in this case is clear: unilateral change orders have a necessary role in responsible contract administration.

C. CHANGE ORDER THEORY

Having established this necessity, how should a field ROICC decide when it is correct to issue a change order? The following issues and factors should be considered at the start of every change, having first defined the scope of the changed work and made a cost estimate.

1. Advantages

What is the advantage in issuing a unilateral change order? Time is the obvious answer. A contracting officer can mobilize a contractor to begin work on a change, and avoid a government delay claim during negotioations. Responsibility for the contract documents lies with the Government. Time spent on redesign and negotiation for defective specifications is chargeable to the government. The ability to shorten this time is gained by the Changes clause. Another advantage is money saved by promptly redirecting a contractor away from work which is in error so that costs do not accumulate on undesireable efforts. In summary, the Change clause gives the Government great flexibility if used correctly. (Cibinic and Nash, p.282,283)

2. Risk

What are the risks of a change order? The largest risk is the possiblity of committing a contractor to work without knowing the full cost of the work. This causes concern for funding, which may be insufficient if the Government estimate proves to be too low. For example, consider a $1,000,000 job whose delay costs are $350/day. A dispute arises over a small change with a Government estimate of $5,000 and contractor proposal is $10,000 (a clear difference of 100%). But considering that a two week delay for negotiations will effectively give the contractor the extra $5,000 in impact costs, then a unilateral change order at the start might make sense. Negotiations could

continue while the work goes on. The cost risk is only $5,000, or 0.5% of the job cost. Consider next a major design change estimated to cost $250,000. The same impact costs of $5,000 for two weeks of negotiation might be money well spent in getting a chance to discuss the changed work in detail with the contractor. The issue here is not simply large versus small; it is to consider the Government's risk in the context of the job itself.

3. Risk in the Estimate

How well known are the changed costs? Is the Government estimate firm or soft? The estimating risk is defined by the accuracy of the government estimate. Some types of work might be easily estimated, especially if similar work has already been accomplished by this contractor. If 5,000 yards of fill have been brought in, then the cost to provide an additional 500 yards carries a low estimating risk since the cost is predictable. Switching from block construction to tilt-up panels is a quantum change for any contractor, and the cost of such a change could not be known with certainty. The Government estimate should not be treated as a single figure, it should be developed and used as a range of costs. Make a point to know the estimating risk, and be ready to compare it to the delay risk.

4. Impact on Schedule

What is the impact of the change on performance and schedule? Is the changed work on or near the critical path?

Does the changed work start soon, tomorrow morning perhaps? If the changes work is close at hand a unilateral might make sense. If the work is on the critical path, and it starts tomorrow morning, a change order with no request for proposal can be correct. Government delays can be costly, both in extended overhead costs and in slow delivery of projects to the customer. The cost and time risks of delay should be weighed against the cost risk of the change order. Sometimes the cost risk could be the lesser of the two evils. The impact of the changed work, including material lead time and the effect on the job schedule should be carefully considered.

5. Visibility of Change Costs

Can the costs of the changed work be tracked with certainty after issuance of the change order? Accounting in the construction industry is not always sophisticated. The costs incurred on the changed work can be an indication towards a fair price for the work. Such a "total cost" approach has serious limitations, but actual cost behavior can still be a source of useful information, even if some costs are rejected as inefficient, unnecessary, or unrelated. If unilateral changes are to become more frequently used, consideration should be given to a requirement for contractor collection of related costs. The letter of direction should contain such a requirement. Unless a general clause is used the changed requirement for accounting could turn into a cost item since it was not originally

in the contract. A general clause to require cost separation for changed work should be considered for routine use in all contracts.

6. Notice to Proceed, Not to Exceed

What is the impact of the "notice to proceed, not to exceed" (NTP,NTE) requirement? The "Changes" clause does not speak to contractor's obligation to accept a not-to-exceed figure. The legal obligation for a contractor to observe the figure is uncertain at best. Cibinic and Nash address the issue:

> The most troublesome technique used to modify the change order when agreement cannot be reached on the price is the issuance of a unilateral change order with the notation that the price of the change is "not to exceed" a stated dollar amount. In some cases, such a form contains a signature line for the contractor to execute without any description of the import of that signature or with a notation that it is an "acknowledgement" or some other vague description. Some contractors have dealt with this type of form by adding clarifying language and returning the form to the contracting officer. Such a statement might read:
>
> > The signature of this contractor signifies only that receipt of this change order is acknowledged. The contractor will proceed with the work as changed with the understanding that an equitable adjustment will be negotiated pursuant to the Changes clause of the contract.
>
> Such language should indicate that there is no acceptance of the "not to exceed" price. Other contractors have refused to execute the form but have proceeded with the work. (Cibinic and Nash, p. 303)

Contracting Officers should be aware that the "not to exceed" language may be a futile effort and that the final figure for the equitable adjustment can exceed the figure given.

7. EFD Approval

What are the adavantages and disadvantages of the EFD approval requirement? The advantage is control; the EFD can insure that field personnel do not misuse a tool which can alienate contractors and incur unforeseen costs. The disadvantage is that the time spent administratively processing the request for a change order can defeat the purpose of the clause. Returning to the earlier example, if the EFD takes two weeks to approve the request, then the benefit of the unilateral is defeated. Consideration should be given to establishing a dollar range for small changes and delegating the authority downward. The authority for issuing a major change unilaterally should stay at the EFD.

8. Summary

In summary, what role should the change order have in future NAVFAC contracts? A larger role than at present, but how much so? Change orders should be seen as an acceptable and necessary tool of effective contract management to be used anytime it is in the Government's best interest. The concept of change orders as a last resort should be dispelled and the administrative processes should be well defined to ensure that change orders are issued quickly, as any delay in action defeats the strength provided under the clause. Awareness by contracting officers and administrative personnel is the key to its successful use. If

contract administration personnel are aware of the benefits and the limitations, the risks and the opportunities of the Changes clause, then there is no reason to avoid a change order where it is appropriate.

APPENDIX D

WEATHER DELAYS

Weather has an undeniable effect on construction, and disputes involving weather are numerous. The reasons for this are not hard to understand. Weather, while somewhat stable and predictable over long periods of time, is very unpredictable in the short run. Who could guess that it would rain two weeks straight starting the very day roofing was to begin? Contractors do not control the weather, and their desire to reclaim time lost to weather is understandable. It must also be understood that weather is a risk, part of which the contractor has accepted by signing the contract. Bad weather may, or may not, entitle him to a time extention.

Unfortunately, weather also seems to be a claim route for some contractors simply because they are behind schedule. Weather is a benign sort of claim; it does not attack the Government directly, and a contractor may attempt to claim weather delay for lack of a better claim.

Even though the weather clause is short and relatively clear, a large number of weather claims still come before the Armed Services Board of Contract Appeal (ASBCA). The sheer number indicates that either the contractor or the

Government, or both, have some lack of understanding regarding the clause. This fact provides sufficient reason to take a closer look at weather delays.

A. THE FAR CLAUSE

The contract clause which allows time extension for weather delays is the "Default" clause. The clause reads:

> (b) The Contractor's right to proceed shall not be terminated nor the contractor charged with damages under this clause, if-
>
> (1) The delay in completing the work arises from unforeseeable causes beyond the control of and without the fault or negligence of the Contractor. Examples of such cause include... (x) unusually severe weather. (FAR, 52.249-10)

Other than the clause itself, information is scarce concerning the review and resolution of weather claims. No specific direction is found in the FAR, DFAR or NARSUP which tells the field level contract administrator how to set up the Government position on these claims. Other sources available, such as the AFIT and ALMC courses, do not address weather delays since the issue is less important in a manufacturing environment than it is to construction. ASBCA cases provide a good explanation.

B. ASBCA CASES

The following cases deal with weather claims decided by the ASBCA. As a group the decisions begin to define the boundaries within which the Government and the contractor should act. A summary of theory follows the cases.

1. Carney General Contractors, Inc; 79-1; 13,852.

The contractor "is entitled to an extension of time for delays caused by unusually severe weather." Citing Allied Contractors, Inc, (IBCA, 1962, 3501), the Board recalled:

> It is well settled that the terms 'unusually severe' does not include any and all weather which prevents work under the contract. The phrase means only that weather usually encountered or reasonably expected in the particular locality during the time of year involved.
>
> A contractor can obtain relief under the Default clause upon a showing that performance was hampered by unusually severe weather....Unusual weather is by its very nature weather which could not have been foreseen.

Citing Kirby Waterproofing, Inc., (GSBCA, 68-2, 7207) the Board continued:

> Thus, before we can determine if there occurred unusually severe weather we must first determine what it would have been reasonable for Appellant to foresee. The normal way of ascertaining this is by comparison with historical weather data."
>
> Foreseeability, in our opinion, is not always measureable in a strict formulaic sense by subtracting foreseeable delays from actual delays. A contractor may be actually delayed beyond statistical limits if for instance, all the rain in a given period falls during normal working hours or its sequence and concentration are such that muddy conditions are prolonged. Conversely, if all of the rain falls on weekends or after working hours, rainfall outside statistical limits may result in no delay.

2. Pacific Western Construction, Inc.; 86-2; 18,816.

> In order to establish that the delays (for weather) it encountered were excuseable, it is not sufficient for appellant to establish that the weather conditions... were unusually severe. There must also be proof that these conditions prevented contract performance.
>
> The effect of the weather and not the weather per se is the key to relief.

3. Excavation-Construction,Inc.; 86-2; 18,747.

In a case where several Government delays extended the duration of the job, and unusually severe weather occurred during the extention period, the Board stated:

the contractor claims entitlement to a price adjustment for seven days of extended performance due to the net effect of unusally severe weather during December, 1976, and January and February, 1977. The basis for this claim is the asserted fact that (the contractor) would have completed the contract work before encountering the unusually severe weather if the (Government) had not earlier delayed (the contractor's) performance.

A price adjustment was denied for delays.... The board did grant a seven day time extension. The contractor contended that a price adjustment was appropriate here because the changes, for which the government was responsible, cause him to be exposed to the weather.... There was no contractual or legal basis for allowing a separate price increase in addition to whatever adjustments might apply to the underlying delaying events.

4. Coliseum Construction, Inc.; 86-2; 18,857

Quoting the Board:

Appellant here contends that there was an unusually large amount of rainfall during the performance period of this contract, amounting to a differing site condition for which appellant is entitled to an equitable adjustment.

However, we hold that this does not constitute a differing site condition, because rain is not the sort of "physical condition at the site" which is contemplated by the Differing Site Conditions clause. Weather is not a risk which is shifted to the Government via that clause.

Turnkey Enterprises... where the Court stated that weather conditions were considered to be acts of God and that neither party is liable to the other for costs resulting solely from acts of God.

5. H.B. Mac; 86-3; 19,145.

This contract contained a clause which specified the number of bad weather days which could be expected. When the actual number of days exceeded the given number, the Government allowed a time extention for the additional days.

The contractor claimed that, since the number was specified, the additional days constituted a change and that cost was due as well as time. The Board held that weather delays entitled the contractor to a time extention only, not monetary relief.

6. Preston-Brady Co., Inc; 86-3; 19,127.

Citing Essential Construction Co. (78-2, 13,314) the Board gave the elements needed to grant a weather related time extensions:

(1) There must be identification of the work controlling the overall completion of the contract;

(2) It must be established that this controlling work was delayed by the weather; and

(3) It must be established that the weather was unforeseeable, i.e., unusually severe.

Here the contractor demonstrated more than normal rainfall for the period, but when the work in question took only 9 days to complete versus the 10 days originally scheduled, the Board concluded that no damage had occurred as a result of the "unusually severe" weather. The Board denied the contractor's claim.

7. American Combustion; 86-3; 19,296.

The contract included excavation work for which shoring and dewatering was required. After a considerable rainfall the dewatering pump clogged and the excavation flooded and caved in. The contractor claimed that the severe rainfall caused the event. The Government argued that the pump was undersized and that the shoring boards were spaced too far apart allowing material to pass through between them into the pit.

The Board found the Government's position convincing, based on the inspector's testimony that he had warned the contractor before the rainfall that the equipment was

inadequate and that problems could be expected. No weather delay was found.

3. D.L. Muns Engineering and Building Contractors; 87-2; 19,709.

Long readings of legal cases can be tedious, but occassionally there is levity. Quoting the Board:

> Argument IV concerns the provision in the contract regarding time extensions for unusually severe weather. Appellant argues that this provision is ambiguous, and therefore should be construed against the Government. While this is a novel arguement, it is without merit. The provision concerning extensions of time for ususually severe weather, a time-honored clause, is clear and unequivocal. There is no ambiguity; consequently, there is no ambiguous provision to adversely construe.

C. WEATHER DELAY THEORY

In view of the above cases it is possible to set down some guidelines for resolving a request for weather delay.

First, to repeat the fundamental elements:

(1) Weather delays are correctly processed under the "Default" clause.

(2) Weather delay entitles a contractor to a time extension only; monetary relief or compensation can not be granted under this clause.

(3) The effect of the weather on the work is the key, not simply days of rain versus a historical average.

In any weather delay claim, the days on which the unusually severe weather occurred should be matched, day for day, against the contractor's schedule. The main thought while doing this is to find what impact, if any, the unusually severe weather had on the job. The contractor's

schedule can be acceptable evidence of what would have occurred unless the contractor is way off schedule, rendering the schedule inaccurate. Activity durations can still be taken from such a schedule. Daily inspection reports, contractor reports, inspector's dairies, and the like also provide good evidence of how the work was impacted by weather. The object is to define **the impact** of the unusually severe weather on the job. Many forms used in ROICC offices simply indicate "rain" regardless of when it occurred. The time and duration of the severe weather is important and should be recorded daily and accurately.

Consider carefully what activity was going on at the time the severe weather occurred. Did the weather actually stop or slow down work? What work? How long did the delay last? Did any work continue? Was the delayed work on the critical path? If the work delayed was not critical to timely completion of the overall job then a time extension is not due. Did one day of severe weather render the site unworkable for longer than one day? For example, if a day of rain is found to be in excess of what could normally be expected, and if that day of rain bogged down the fill site for three more days before it dried out, then the one rain day caused the contractor a four day delay. In another example, just because it rains 14 days in March versus a historical average of 10 days does not entitle a contractor to extra time if he had already moved inside to work. Consider the **effect** of the weather.

The historical average is an important element in supporting a claim. The Board expects someone to define what makes up "unusually severe weather". Ten years of data for the jobsite location is safely adequate. Five years will support most cases if ten years are not available. The weather data should be relavent to the jobsite. Small distances in coastal environments can result in significantly different weather patterns; use the best data available. Weather data for any ROICC office should be maintained continuously in anticipation of weather claims.

In summary, the following steps are needed to fully address a contractor's request for weather delay:

(1) Know what weather occurred, and when.

(2) Was the weather "unusually severe" (Did it exceed what was foreseeable based on historical data?)

(3) What work activities were affected by the unusually severe weather and for how long?

(4) Did the unusually severe weather cause the overall job to be delayed?

If the answers to the above questions are understood and well documented then a fair determination can be made of how much time extension is due the contractor. Adjustments in price are not due the contractor for weather delays under the "Default" clause.

APPENDIX E

EXTENDED OVERHEAD

Extended overhead on construction contracts is a controversial issue. Numerous cases argue the various aspects, but the decisions are far from consistent. Little guidance is available on the issue, and what guidance is available does not cover all of the different sides of the issue.

A. AVAILABLE GUIDANCE

1. FAR Guidance

The concepts of extended overhead or unabsorbed overhead are not addressed in the FAR. The general definitions of indirect cost pools, allocation, and G&A theory appear at 31.105. Indirect cost allocation and the relation to the base are found at 31.203. The appropriate period to be used is also found there.

2. DFARS Guidance

No information is present on the subject.

3. NARSUP Guidance

No information is present on the subject.

4. NAVFAC P-68

The February 1985 version of the P-68 contains a brief explanation of field and home office overhead at 5-304.5(d). The concept of a percentage allocation of the indirect cost pool over the direct cost base is taught there, and has been read and followed for many years. The explanation and

example given undoubtedly shaped the concept for a great many NAVFAC personnel. The alternate procedure of using 3% of total cost as home office overhead reinforces the concept.

The proposed version of the P-68 in FAR format has dropped the explanation of field and home office overhead. The example is also deleted. The cautionary words have been added that the 3% formula should only be used where the value of construction and time are proportionate to each other. This is true, but no explanation is given as to why or how to act if this is not the case.

5. NFCTC "Contract Modifications" Course

The course notes mention unabsorbed overhead (p.III C-1, 1 of 4) in relation to impact costs but the term is not explained. While the direct cost impact of labor inefficiency and materials, both are explained, the indirect impact costs are not covered. The course does present the Eichleay formula in class.

6. NFCTC "Construction Contract Administration And Management" Course

A definition of extended overhead is provided (p.2887-4, 4 of 7) as follows:

> Imprecisely used terminology which attempts to quantify contractor's idled managerial costs for keeping the job or operations open during compensable delay periods when full production was not available. Should not include idled direct resource costs which are compensated separately but does include contractor's overheads and related expenses not borne by direct work activity.

In short, there is no clear explanation of extended overhead in the normal literature available to NAVFAC field personnel.

B. BOARD OF CONTRACT APPEALS CASES

1. Dawson Construction Co., Inc.; 79-2; 13,988.

The General Services Board of Contract Appeal (GSBCA) awarded the contractor Eichleay-type extended overhead for a six day delay early in the contract. The Government attempted to quantify the direct costs during the suspension and allocate the indirect costs accordingly. The Board, noting that the Government's calculation did not take into account the duration of the delay, held with the contractor.

The Board lamented, at p.68,635, that a contract provision to regulate behavior of overhead in the event of a delay was absent. In the absence of a clause, the Board had to decide the case as equitably as possible based on the record in front of it.

2. Excavation-Constructon, Inc.;82-1; 15,770.

The Board distinguishes at p. 78,068 the clear differences between suspensions and changes. A change, especially an additive one, has a direct cost associated with it which will absorb a reasonable amount of overhead. A suspension will have no direct cost, or very minor direct cost, and will be uanable to absorb overhead in the usual fashion. This is the problem which sends the Boards in

search of a formula which is a function of time. They feel that the duration of delay must be related in some way to the amount of compensation given. The Eichleay formula, while not perfect, is what the Board chose here.

3. Excavation-Construction, Inc.; 83-1; 16,293.

A claim for extended home office overhead costs cannot involve breach of contract because the delays, and the compensation, are foreseen by the "Suspension of Work" clause. The simple act of claiming an Eichleay-type formula was insufficient to prove entitlement.

4. G & S Construction, Inc.; 86-1; 18,740.

Constructive suspensions are treated the same as ordered ones. The contractor has the duty to minimze costs during a suspension.

5. George Hyman Construction Co., Inc.; 85-1; 17,847.

This case is typical of the Army Corps of Engineers Board of Contract Appeal's (ENG BCA) support of Eichleay type formulas. Here the Eichleay formula is referred to as a "tested and long judicially-approved method". (p. 89,354) The ENG BCA felt that any delay increases the overhead chargeable to a job because of the longer engagement. Further, all overhead must be absorbed by the totality of the work. Lastly, by obtaining other work the overhead allocation will decrease on the balance of the existing work.

6. Miles Construction; 84-1; 16,967.

Here the Veterans Administration Board (VABCA) found that delays which tie up a contractor's bonding capacity and thus prevent him from pursuing other work is sufficient to prove injury and therefore entitlement.

7. Capital Electric Company; 83-2; 16,548.

This is a landmark case on extended overhead. See Appendix F for a discussion of the original GSBCA case. See also the Court of Appeals, 729 F .2d 743, (1984) for the ruling which overturned the GSBCA and awarded Eichleay to the contractor.

8. Ricway, Inc.; 86-2; 18,841.

In a post-Capital Electric case the ASBCA again denied an Eichleay-type formula, saying that its use is not automatic and that damage must be proved.

C. EXTENDED OVERHEAD THEORY

1. Overhead and Indirect Cost Behavior

In order to discuss "extended" overhead it is first necessary to understand "normal" overhead. Direct costs are those which can easily be identified with a particular job. Indirect costs are those which cannot be identified to any specific job. Home office overhead is such an indirect cost. Home office overhead normally includes the salary of the president, secretaries, bookeepers, draftsmen and other employees who do not work on any jobsite. It also includes such costs as office rent or depreciation, office utilities,

office vehicle costs, insurance, office supplies, reproduction and similar costs. Field overhead is normally not included because field costs are dedicated to a specific job or jobs.

Accrual accounting requires that all costs be matched as closely as possible to the benefits derived. Indirect costs are collected in "pools" and then the pools are allocated, or prorated, over a "base". The base can be any set of costs which fairly represent the behavior of the pool.

Many indirect costs, such as home office overhead, are considered "period expenses". This means that they are charged off at regular intervals at the end of each accounting period. This is in contrast to job-order type accounting, where costs are always charged to the job no matter when they are incurred.

The mentality which surrounds the bidding process can confuse the accrual concept. If a contractor's overhead runs 3% of direct costs, then he would normally mark-up his bid to reflect this. If the competition is stiff, he may choose to lower his bid to win. He will rationalize that he is making direct costs and the overhead will be made up on other jobs. When accrual accounting is applied, however, the underbid job will be charged its full share of overhead and the job will reflect a net loss. The allocation of overhead must be consistently applied regardless of bidding strategy. The FAR and the Cost Accounting Standards are very clear on this point.

There is no single, exact method of allocating home office overhead. (Coombs, p.257) (Usry p.144). Total cost is a common base for distribution of home office overhead (Coombs, 256). Here the indirect costs are divided and assigned as a direct relation to the total direct costs for the work. This is similar to the method explained in the existing P-68 and is in common use in the construction industry because of its simplicity.

Consider an example of home office overhead allocation involving the rent for the contractor's building. The rent must be allocated, or charged off, against the work done in that accounting period. The rent did not contribute directly to the jobs in the field. A base must be chosen which will fairly distribute the rent costs to the various job orders. Contract size is one base, and the contract price could represent size. Allocation would be computed as follows:

$$\frac{\text{Job A Price}}{\text{Total of All Contract Prices}} \times \text{Rent Cost} = \text{Rent Allocated to Job A}$$

Direct labor hours could also be used as a base. In that case the formula would be:

$$\frac{\text{Direct Labor Hours (Job A)}}{\text{Total Direct Labor Hours for All Jobs}} \times \text{Rent Cost} = \text{Rent Allocated To Job A}$$

Both of the above formulas use a percentage method of allocation. A different method of allocation uses a daily rate formula. This method starts similar to the above formulas, but then divides the allocated amount by the length of the job, as seen below:

$$\frac{\text{Rent Allocated to Job A}}{\text{Job Length in Days}} = \text{Rent Allocated to Job A Per Day}$$

If the Government delayed the contractor for ten days, then the daily rate would be multiplied by ten. The rent charged to the job is now a function of job duration.

A direct cost base allocation of indirect costs does not always assign costs equitably. During a suspension of work home office costs continue at a relatively fixed rate. Since the direct costs for the suspended job are zero during the suspension, then the home office overhead assigned by any percentage method will yield zero. Similarly, if only minor direct costs are incurred in a Government caused delay, then the home office overhead absorbed will be small. Since the home office costs are relatively constant over time. the application of the standard percentage markup may not fairly compensate the contractor for the delay.

An alternative method of allocating home office overhead is through the daily rate formula. The daily rates, of which Eichleay is the best known, allocate the home office costs over time as seen in the formula.

The outcome of a daily rate formula can be surprising to a contract administrator who is used to the direct cost method. For example, if the issuance of a small change for $5000 delays a contractor for 60 days, the "normal" direct cost allocation of home office overhead might be 3% of $5000, or $150. If the contractor's daily rate were computed it might easily result in $100 per day. $100 per day times 60 days of delay is $6000, more than the cost of the change itself. Since construction contract administrators normally work with fixed price, sealed bid contracts they have no access to the contractor's home office cost structure. Consequently the daily rate calculation can come as a surprise to the unwary.

2. BCA Decisions and Extended Overhead Theory

The BCA decisions regarding extended overhead are numerous and confusing. The Boards have plunged headlong into the issue in search of a clear answer and found none. The reason for this is, perhaps, that the very nature of overhead allocation is arbitrary. Arbitrary is good enough for accountants and bookkeepers, but when a Board is dealing with legal damages it must ask for more specific proof of what occurred in the case at hand. There is no single formula which can be applied indiscriminately across many cases and give the right answer for all. Such a formula does not exist.

Rather than go in search of a formula, it is better to review the cases and the issues involved, and search for the underlying principles and how they have been applied.

3. The Causes of Extended Overhead

Government delay is the starting point for extended overhead. The "Suspension of Work" clause grants the Government the right to suspend or delay the contractor. The cause of extended overhead is simply Government delay or suspension of work. All of the following can be causes:

a. Slow submittal reviews.

b. Slow responses to contractor requests for direction or clarification.

c. Slow issuance of changes, even if the cost of the change is agreed on.

d. Design errors which require redesign.

e. Late delivery of the facility (renovation)

f. Late delivery of Government furnished property or equipment.

In an area as clouded as extended overhead, the best solution is avoidance.

4. Elements of Proof

The contractor must prove both entitlement and quantum. In order to prove entitlement to an adjustment he must prove that:

a. The Government delayed or suspended the work. Constructive delay through inaction is treated the same as a delay order.

b. The delay must be solely due to the Government. Concurrent delays do not count.

c. The delay must have caused the contractor to incur costs he would not have otherwise. The costs can include labor, material, equipment, inefficiency or overhead.

Once entitlement to a certain number of compensable, Government-caused delay days is established, then the Board must fix an amount for the adjustment. It is here that the difficulty arises. The Government will normally argue for a percentage rate while the contractor will claim a daily rate formula such as Eichleay.

The original Eichleay case involved a contractor whose entire capacity was devoted largely to the jobs on which the delays occurred. The delays were long, roughly the length of the contract itself. For this circumstance the Board upheld Eichleay's formula. In general, for this type case involving long work stoppages where the job is a major part of the contractor's business base, the Eichleay formula closely approximates reality and stands a good chance of being upheld.

Less clear is the situation where a short delay occurs, or where the delayed work is small in relation to the size of the contractor. Small jobs can be easier to obtain quickly. When it is unlikely that the contractor's bonding capacity is a limiting factor, it becomes harder to prove damage. It has been done, however. In Excavation-Construction, Inc. the contractor was awarded Eichleay extended overhead on a six day suspension. In Dawson Construction an Eichleay type formula was upheld on a fourteen day delay.

The contractor has the burden of proof; he must prove his claim. This has been done successfully by proving that it was impossible or impractical to obtain other work to substitute for the delayed work. This difficulty can exist because the contractor is at the limit of his bonding capacity. Capital Electric is such a case. Another reason is because the Government holds the contractor on the job and insists that work will begin again "soon". A third reason could be where the staffing or equipment is peculiar to the job and cannot be reemployed easily. If, for example, a job at Adak, Alaska is delayed it is unlikely that a contractor could rapidly redeploy his workforce.

Once the contractor has proven that he was delayed and damaged, the access to the Eichleay formula becomes easier. The Boards have held, somewhat repeatedly, that:

> A claimant need not prove his damages with certainty or mathematical exactitude. It is sufficient that he furnishes the court with a reasonable basis for computation, even though the result is only approximate. (George Hyman Construction Co., citing Wunderlich)

The Eichleay formula has been accepted as a good approximation. Since, as already noted, construction contractors have relatively primitive bookkeeping systems (as compared to manufacturing) and since any allocation of overhead is somewhat arbitrary, the Boards seem little inclined to push for exactness beyond what Eichleay provides. In G&S Construction, the Board commented of the Eichleay formula for allocating home office overhead:

> It may not be the only possible method of doing so, but it is a tested and long judically-approved method...While precedent is certainly for consideration, more fundamentally, we believe, Eichleay should be affirmed because it is a rational, workable and fair way to approach a somewhat difficult conceptual problem... {G&S}

5. Problems in the Theory

In Capital Electric Company the Board touches on an interesting argument, in essence that if:

a. the work, including the delay, all occurs in a single accounting period, and

b. the contractor is not otherwise damaged,

then underabsorbed overhead cannot exist. It further argues that even if the delay crosses an accounting period, any underabsorption of overhead in the first period will be balanced by an overabsorption in the latter period. This argument was overshadowed in Capital Electric because the testimony proved to the Court of Appeals that the contractor had been damaged since his bonding limits prevented pursuit of other work. Further, the parties had stipulated "compensible" delay, so the Board's arguments against entitlement were in vain.

Figure I attempts to illustrate this point. In the top diagram, a contractor is assumed to have his crews and equipment fully employed at all times. Any delay which occurs would appear to cause a loss of direct cost base for eternity. This model could be easily encountered in a manufacturing environment.

In the bottom model is a more accurate view of what a construction firm would look like. Gaps exist where

resources are underutilized. At other times, crews may be on overtime as work exceeds capacity. It has long been recognized that contracting is a marked by feast and famine. Under a delay in this model, the impact of the delay could only be known by analyzing that moment in time. If the contractor was in a period of light work and the crews were not required elsewhere, then a delay might not affect him at all. In that case, bonding capacity is not a constraint. If the contractor were overloaded and the delay pushed some work out of the crunch, the delay might actually benefit the contractor. Only if the delay caused a permanent loss of other business base could underabsroption occur.

The length of the accounting period will also affect the perspective. A very short period, say monthly, may encourage the upper model to seem real. Longer periods would favor the lower model because the changes could be observed within the period.

6. A General Clause for Extended Overhead?

In Dawson the Boards mention the lack of a clause to guide them. How would such a clause be written?

A clause might state that home office overhead for delays and suspensions would be calculated using the normal, percentage method. This would obviously favor the Government, and the contractors would object. The objection would have merit since the contractor would be exposed in some cases to a risk he could neither predict nor control.

A clause could be written that would specify an Eichleay type formula to be used for all delays and suspensions. This would ease calculation, but would be unfair to the Government since compensation would be awarded even where no damage occurred.

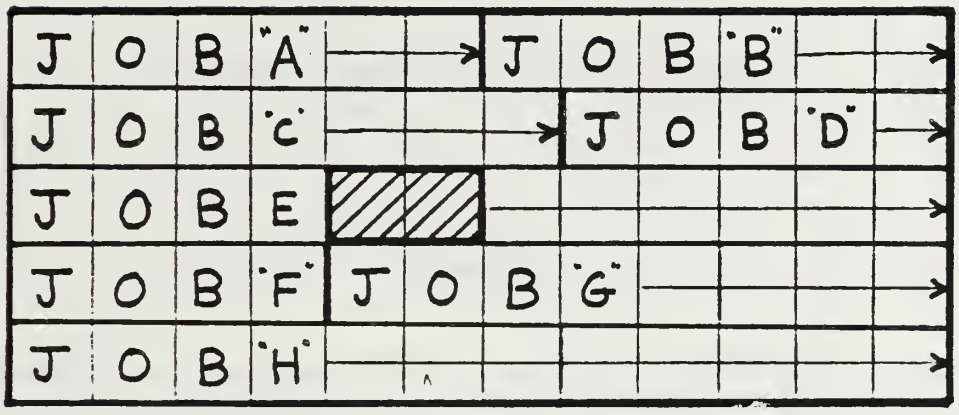
A hybrid clause could be drafted, in which short delays would have any extended overhead denied. This is realistic in most cases. For longer delays, the clause could specify the use of Eichleay contingent upon the contractor's proof of entitlement. This would reduce the complexity of the cases, yet maintain the burden of proof of damage. Any real effort to draft a clause would probably follow this route.

D. SUMMARY

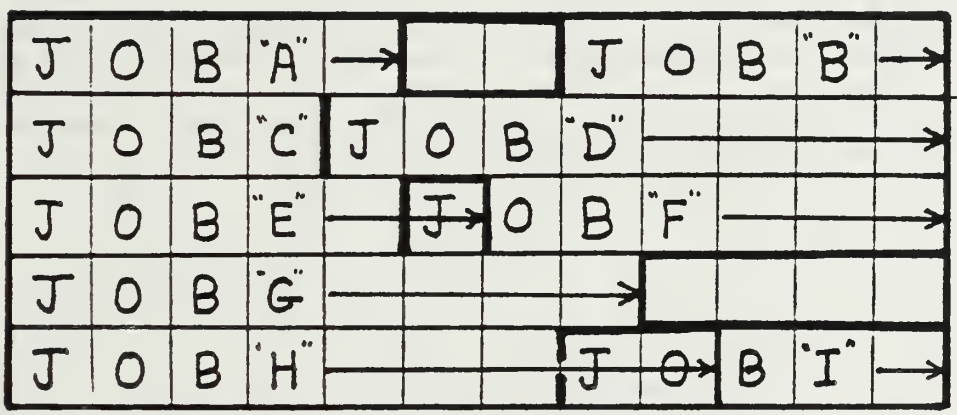
In an area where no textbook solutions exist, the only way for field personnel to understand and defend against extended overhead is through education. Senior personnel within NAVFAC must understand the underlying concepts of accounting and have an appreciation for some of the key decisions by the Boards.

The best defense is a good offense. Responsible contract administration can eliminate a lot of the delays which might lead to an extended overhead claim.

FIGURE I



TIME



TIME

DELAY

JOB OVERLAP

TIME W/O SCHED WORK

APPENDIX F

CAPITAL ELECTRIC COMPANY

A CASE STUDY IN EXTENDED OVERHEAD

NOTICE

The following case study contains passages from the GSBCA Cases Nos. 5316(5059) REIN, 5317(5235) REIN; 83-2; 16,548. The case study was prepared for use by engineers and contract administration personnel in an academic environment to promote discussion and understanding of the general nature of extended overhead in construction. Much has been deleted and restated in an attempt to keep the concepts as clear and as brief as possible. These deletions and omissions render it unsuitable for use in any legal application. Those desiring a complete understanding of the case should read the original case in its entirety, along the the subsequent decision by the Court of Appeals, Federal Circuit, 729 F.2d 743 (1984) which overturned the ruling by the GSBCA.

FINDINGS OF FACT

Contract No. GS-04B was awarded to the appellant, Capital Electric Company, on October 12, 1976. The $2,535,177 contract required appellant to furnish and install electrical, mechanical and plumbing work within the Federal Building and United States Courthouse at Fort Lauderdale, Florida, that was then under construction. Contract completion was required in four phases. The contract contained the usual General Provisions for construction contracts including Standard Form 23-A, April 1975 Revision. The contract was substantionally completed on March 1, 1979, 427 days after the schedule completion date.

Appellant's contract work was also unreasonably delayed due to the Government's failure to act upon submittals for the elctrical panels, main switchboard and emergency generator while it was contemplating a contract change that was in fact never issued. The parties have stipulated that appellant was unreasonably delayed for a period of 303 days. The effect of the unreasonable delay on appellant's contract work was such that appellant was never able to man the job as planned. Appellant's bid estimated 16,492 direct labor hours for the contract base bid of $1,805,000;for unit price items that totalled $730,177, appellant included an additional 7,378 direct labor hours(for a total of 23,870 labor hours). Appellant actually charged 27,918 direct labor hours to the job. Appellant experienced the impact of the unreasonable delays in 1978. Work that was anticipated in 1977 was shifted into 1978.

Appellant's home office staff is quite small, consisting of appellant's president, a secretary-bookkeeper, a draftsman, and an estimator. Appellant's home office overhead is a relatively fixed expense. Appellant's bid estimate included $114,000 for home office overhead. As a percentage of the original contract price of $2,535,177, finding 1, that equated to an approximate rate of allocation of home office overhead of 4.7 percent of direct costs. Appellant maintains its books of account over a yearly period that begins each August 1st and ends the following July 31st. Appellant's home office overhead is charged against gross profit on appellant's annual income statements as an operating expense. Appellant includes as part of its home office overhead the costs of telephones and automobile insurance. Appellant capitalized the automobiles and trucks it owns, together with shop equipment and office furniture and fixtures. Tools purchased for performance as a job progress are expensed--they are charged to the cost of sales together with direct labor, direct material and field supervision. Builder's risk insurance purchased by appellant is similarly expensed. Appellant records as "sales" in each of its accounting periods the progress billings it makes under each of its contracts.

Appellant's home office overhead charged as operating expense on its yearly income statements included costs not allowable under general contract cost principles, such as advertising costs, contributions, entertainment costs, and interest costs. Appellant's home office overhead, less unallowable costs, for each of its fiscal years 1977 through 1979 was: 1977-$139,132; 1978-$178,564; 1979-$136,033.

Appellant's operating results, as reported, for each of its fiscal years 1977-1979 were:

1977	Sales (billings)	$ 912,326
	Cost of Sales (direct labor,material, field office and supervision)	$ 734,476
	Gross Profit	177,850
	Operating Expense (home office expense)	161,368
	Net Operating Income	$ 16,482
1978	Sales	$3,280,497
	Cost of Sales	3,062,881
	Gross Profit	217,616
	Operating Expenses	202,515
	Net Operating Income	$ 15,101
1979	Sales	$ 722,492
	Cost of Sales	741,969
	Loss	$ (19,477)
	Operating Expenses	150,771
	Operating Loss	$ (170,248)

Appellant's operating results, as reported, if matched to the period of contract performance, as extended by the conceded unreasonable delays, would show total contract revenues of $3,979,864 and total home office overhead of $433,818.

Hearing Testimony

Q. Mr. Branam, when the Fort Lauderdale job was delayed for this extra year or so--a little bit over a year-- was Capital Electric able to go out and get other jobs?

A. Well, we got some jobs, but we couldn't go out for a big job. You have got to remember that we are not that big of a company. Not only that, we have to bond a lot of jobs. And when we have a work load facing us, the bonding company just won't bond you.

They look at how much volume you have been doing and they realize that this job is only a certain percentage finished, they are not going to rush out and bond you on another big job.

Q. Now, Mr. Branam, is it possible--and I mean possible--when you see a job being delayed like this, for you to go out and get other work to absorb overhead during this potential delay period that you might foresee?

A. Not a big job like that. A smaller job that delayed you, that is one thing. When a job that big, when it represents such a big part of our overall business, no. You cannot do it. First of all, you have got to remember, I have got--we are limited to capital. (sic)

We are limited even though I own the company. We are limited to bonding capacity, amount of money we can borrow. In other words just plain--the bonding companies or other--even if we are working as a subcontractor for a general contractor, where he says 'I think I--50 bonding job. Now I know you.' (sic)

His bonding company knows what is going on. He says, 'No, I do not want him to do that job for you because he has got this heavy workload coming.' (sic)

On March 12, appellant submitted an omnibus claim seeking a contract schedule extension of 316 days and a contract price adjustment of $630,997. In a final decision of October 12, the contracting officer denied the claim as to both contract price and time.

Appellant's omnibus claim, as modified at the hearing, was calculated as follows:

Extended Field Office Expense	$ 42,602
Extended Tool & Equipment Costs	7,890
Lost Labor Efficiency	56,103
Extended Home Office Overhead	135,296
Poole and Kent Claim	128,075
Firepak Claim	28,603
United Sheet Metal Claim	44,844
Honeywell Claim	6,072
Johns-Manville Claim	3,521
Poole and Kent Commission	21,111
	$482,421

Appellant's claim for extended field office expense was calculated by identifying those items of direct costs incurred in 1978 attributable to the job site field office, allocating to those costs a portion of the telephone, automobile costs and automobile insurance costs and dividing the total, $51,320 by 365 calendar days to arrive at a daily rate of $140.60. The daily rate was multiplied by the 303 days of conceded unreasonable delay to arrive at the $42,602 claimed.

Appellant calculated its extended home office overhead claim by using what is known as the modified Eichleay formula. That formula is commonly expressed as:

Original Contract Price / Total Billings for Original Contract Period + Contract Billings For Extended Period	X	Fixed OH for Original Contract Period	=	Fixed OH Allocable to contract

Fixed Overhead Allocable To Contract / Original Days of Performance	=	Daily Contract Fixed Overhead

Daily Contract Fixed Overhead	X	Days Delays	=	Amount Recoverable

The calculation was made by matching appellant's home office overhead, less unallowable costs to the contract period, to arrive at assumed fixed overhead allocable to the contract of $168,785, and dividing that result by the number of days in the original contract schedule, 378, to arrive at a daily home office overhead of $446.52. The claim was calculated by multiplying the daily rate of $446.52 times the number of days of conceded delay. As an alternative, appellant seeks extended home office overhead calculated by use of the formula announced in Eichleay Corp. That formula is expressed as;

Contract Billings / Total Billings For Contract Period	X	Total Overhead For Contract Period	=	Overhead Allocable to the Contract

Allocable Overhead / Days of Performance	=	Daily Contract Overhead

Daily Contract Overhead	X	Number of Days Delay	=	Amount Claimed

Appellant used the period April 1, 1978, through March 31, 1979, in its Eichleay calculation. The daily rate for extended home office overhead so determined was $311.

The Government conducted an audit of appellant's claims by reviewing the documents and books of account maintained at the offices of appellant. The auditor's results, as modified at the hearing, were as follows:

Extended Field Office Expense	$ 34,673
Extended Tool & Equipment Costs	3,294
Lost Labor Efficiency	41,720
Home Office Overhead	7,331
Poole and Kent Claim	85,850
Firepak Claim	0
United Sheet Metal Claim	286
Honeywell Claim	0
Johns-Manville Claim	0
Poole and Kent Commission	0
Appellant's Commission	0
	$173,154

Discussion

We note at the outset that we are dealing with two separate and distinct concepts--"extended" overhead vis-a-vis "underabsorbed" overhead. **Underabsorbed overhead** is the more familiar, particularly in the context of manufacturing cost accounting. Simply stated, underabsorbed overhead is the consequence of the increase in the rate of allocation of indirect costs to work other than that which is delayed or disrupted. It occurs when the allocation base, typically, a grouping of direct costs, is diminished as a result of that delay or disruption. The contract's share of overhead is diminished; the overhead share of all other contract work is increased. The rate of allocation (absorption) of indirect costs is important when pricing decisions must be made during an accounting period. **Extended overhead** is a concept unique to construction contracting. It has as its premise (a false premise, as it turns out) that extending the performance period will increase overhead costs. Extended overhead is calculated by, and is synonymous with, a daily rate method. Underabsorbed overhead is calculated by determining an allocation rate differential.

Appellant cites particularly our decision in Dawson Construction Co. correctly pointing that there we did, indeed, allow extended home office overhead for a six-day suspension of work directed by a contracting officer under the contract for the structural concrete phase of the same Fort Lauderdale project at issue here.

The Government would have us distinguish Dawson. It alludes to our decision there as yet another example of acceptance of the concept of recovery of extended home office overhead during periods of delay almost as a matter of administrative convenience, and, in addition, says that Dawson involved a total suspension of all contract work whereas the claims su judice are for contract work that was stretched out rather than suspended.

The calculation of amounts due, either as a contract adjustment or as breach damages, for delays encountered in contract performance is particularly difficult because there are frequently no direct costs that result from the impact of such delays. The problem is most apparent in construction contracts, where incurred costs are almost always direct costs. There are few indirect costs to be allocated in construction contracts, and home office overhead is frequently the only indirect cost incurred. H. Wright & J. Bedingfield, Government Contract Accounting 393 (1979). A contractor is clearly entitled to allocate indirect costs to direct costs incurred when additional work under a contract is directed or demanded and that is in fact the most common sort of situation that demands a contract price adjustment. The absence of direct costs traceable to a performance delay, suspension, or extention is precisely the reason why calculation of contract damages or adjustment is difficult.

The truth of the matter is that even in cases of performance suspension, home office overhead is seldom

affected. If the period of performance suspension occurs entirely within one accounting period, and direct costs are not diminished, then the allocation base cannot change and home office overhead will be charged against contract billings on the contractor's financial statements at the end of that accounting period at exactly the same rate of allocation as it would have been had suspension not occurred. If the performance extension or suspension in fact operates to defer direct costs that would have been incurred in an accounting period to subsequent accounting periods, then home office overhead may have in fact been underabsorbed in the accounting period in which the performance delay or suspension first occurred; it also follows, of course, that direct costs so deferred may benefit the rate of allocation in subsequent accounting periods such that home office overhead, or any other properly allocable indirect cost, for that matter, may be overabsorbed in subsequent accounting periods, the latter overabsorption balancing the initial underabsorption. 2 R. Nash, Federal Procurement Law 1409 (1980).

The principle of recovery announced in Comb was, in fact, expanded in Eichleay, and there applied to a period of performance extension rather than performance suspension. There are many other cases. Soon there was no distinction; if contract performance was extended, delayed, or suspended, a recovery of extended home office overhead was permitted. The premise changed as well; if the performance period was extended, overhead costs must have increased ipso facto.

The daily rate concept of recovery of extended overhead that Eichleay represents comports with neither the pervasive principles nor the broad operating principles that encompass generally accepted accounting principles. It neither associates cause with effect nor allocates costs that cannot be so associated to a specific accounting period or periods. It does not assign indirect costs to an appropriate cost objective during the period in which those indirect costs were incurred. American Institute of Certified Public Accountants, Accounting Principles Board, Professional Standards, Accounting, 1026.21, 1026.23, 1027.10-S-6A(1) (1978).

Most recently, the Armed Services Board has said that it will not permit recovery of extended home office overhead for periods of performance delay, suspension, or extension, and that while recovery of underabsorbed home office overhead may be permitted, overhead so determined will be reduced by any home office overhead costs recovered by allocation to additional direct costs incurred on change order work during the affected period. Savoy Construction Co.

The conclusions drawn by the Armed Services Board in Savoy are not new to construction contract law. In 1958, the Missouri Supreme Court ruled to the same effect, holding:

> Prerequisite to recovery of overhead some evidence was essential that such general overhead was not only an expense but also a loss to plaintiff. Because it would seem that plaintiff suffered no loss, no damage, because of the fact that this general fixed

> overhead expense continued during the period of delayed construction. All of the items with which we are here dealing were fixed. Thus, total overhead was exactly the same whether there had been any delay in the job and exactly the same during the period of delay and exactly the same thereafter. Even though a a percentage of that fixed overhead was properly allocable to the job during the delay, any amount so allocated could not represent a loss or damage to plaintiff unless plaintiff would have, but for the delay, obtained other work sufficient in amount to have absorbed the allocated portion of general overhead.

The standard of proof required in Kansas City Bridge has been extended by the Court of Appeals for the Fifth Circuit to require that a construction contractor claiming underabsorbed home office overhead show just which other construction work was available and identify each bid that was not submitted because of the extension. Guy James Construction Co. v. Trinity Industries, Inc. We do have some evidence here that the possibility of appellant's obtaining other work was precluded by the effect of the Fort Lauderdale job on appellant's overall bonding capacity. However, the response of appellant's president to the question posed by the hearing judge compels us to find as fact that appellant could have obtained additional bond coverage in 1973, which in fact is the period of unreasonable delay. We have permitted recovery of extended home office overhead in cases other than Dawson. In Marlin Associates we calculated extended home office overhead using the Eichleay formula as suggested by both parties. We did just the same thing in Schindler Houghton Elevator Corp., again at the urging of the parties (or at least upon tacit acceptance by the Government). The matters that we adjudicate, claims arising under federal contracts, are governed by federal law. Our rule of decision has as one of its sources the common law. Our analysis thus far convinces us that the common law of construction contracts permits the recovery of underabsorbed home office overhead and precludes the recovery of extended home office overhead. That is the view enunciated in Kansas City Bridge and adopted by the Courts of Appeals for the District of Columbia and Fifth Circuits. We expressly overrule our previous determination to the contrary in Dawson, and add that Professor Nash's analysis convinces us that a contractor claiming recovery of under-absorbed home office overhead must also account for the possible benefit of direct costs deferred to later accounting periods that might result in a balancing overabsorption. We deny recovery for the extended home office overhead costs claimed by appellant.

LIST OF REFERENCES

BOOKS

Cibinic, John Jr. and Nash, Ralph C., Administration of Government Contracts, 2d ed., George Washington University, 1985.

Coombs, William E., Esq. and Palmer, William J., The Handbook of Construction Accounting and Financial Management, 3d ed., McGraw-Hill Book Company, 1984.

Matz, Adolf and Usry, Milton F., Cost Accounting, Planning, and Control, 8th ed., South Western Publishing Co., 1984.

GOVERNMENT PUBLICATIONS

The Federal Acquisition Regulations (FAR)

The Department of Defense Federal Acquisition Regulation Supplement (DFARS)

The Navy Acquisition Regulations Supplement (NARSUP)

The Naval Facilities Engineering Command Contracting Manual (P-68)

"The Student Guide For Construction Contract Administration and Management", Naval School, Civil Engineer Corps, Pt. Hueneme, CA

BOARDS OF CONTRACT APPEAL CASES

Bros Construction Co.; 78-1; 13,067.

Carney General Contractors, Inc.; 79-1; 13,855.

Chartwell and Associates; 86-3; 19,355.

Dimarco Corporation; 87-1; 19,456.

Fortec Constructors; 83-1; 16,374.

Fortec Construction; 85-2; 17,972.

Hargis Construction Co., Inc.; 86-3; 19,220.

Lemar Construction Company; 87-1; 19,508.

Line Power, Inc.; 83-1; 16,253.

M. E. McGeary Company; 86-3; 19,038.

Murphy Brothers, Inc.; 86-2; 18,774.

Pacific Western Construction, Inc.; 86-2; 18,816.

Sentinel Electric Company; 83-1; 16,426.

Titan Pacific Construction Corp.; 87-1; 19,626.

Utley-James, Inc.; 85-1; 17,816.

Wickham Contrcting Co., Inc.; 86-2; 18,887.

INITIAL DISTRIBUTION LIST

	No. Copies
Defense Technical Information Center Cameron Station Alexandria, Virginia 22304-6145	2
Library, Code 0142 Naval Postgraduate School Monterey, California 93943-5002	2
Superintendent Attn: Prof. Roger Evered, Code 54ev Naval Postgraduate School Monterey, California 93943	1
Superintendent Attn: LCDR Ray Smith, Code 54sx Naval Postgraduate School Monterey, California 93943	1
Director Attn: Advanced Construction Management Course Naval Facilities Contracts Training Center Port Hueneme, California 93043-5000	12
Naval Facilities Engineering Command Attn: Code 02 200 Stovall Street Alexandria, Virginia 22332-2300	1
Naval Facilities Engineering Command Attn: Code 09C 200 Stovall Street Alexandria, Virginia 22332-2300	1

Thesis
M2572 McMurray
c.1 Navy construction contract regulations vs. the Board of Contract Appeals.

Thesis
M2572 McMurray
c.1 Navy construction contract regulations vs. the Board of Contract Appeals.

thesM2572
Navy construction contract regulations v
3 2768 000 78498 7
DUDLEY KNOX LIBRARY